

74.81 1949 C3 RM

# THE HISTORY

# OF SCHUYLKILL COUNTY

Published by the

# SCHOOL DISTRICT of the CITY OF POTTSVILLE

in co-operation
with the school districts
of Schuylkill County

#### Directors of the Pottsville School District

Edgar Downey, President William Reid, Vice President Howard S. Fernsler, Secretary Lloyd L. Martz, Treasurer Herrwood E. Hobbs Peter J. Pugh Leslie D. Lamont D. H. H. Lengel, Superintendent of Schools

Herrwood E. Hobbs, Director of Publication SCHUYLKILL PRINTING CO., FRACKVILLE, PA.

Copyright 1950 by
THE SCHOOL DISTRICT OF THE
CITY OF POTTSVILLE

#### INTRODUCTION

"The History of Schuylkill County" has been written for young residents of the county in the hope it will help them understand better the role Schuylkill County has played in the growth and development of Pennsylvania.

No phase of history instruction has been neglected more in Schuylkill County schools than the study of the county itself—and this neglect has stemmed from the absence of any suitable publication dealing with Schuylkill County history.

The sole purpose of the publication of this book by the School District of the City of Pottsville, with the generous co-operation of more than 40 other school districts of Schuylkill County, is to provide a practical history guide for school students.

The sponsors of this book wish to thank the following for assistance in research work, writing, counsel, furnishing pictures, and art work and other cooperation in the preparation of contents: Mrs. Margaret .C. Sterner, Carlton R. Sterner, James D. Shelhamer and Martin V. Wixted, for the principal research work; Mr. Wixted, for consolidating the work of the research staff and writing the book; Miss Edith Patterson, librarian of the Pottsville Free Public Library, and Atty. Edgar Downey for aid in rechecking material; Miss Sarah Unger, head of the English Department of Pottsville High School; and these for pictorial assistance: Mr. Shelhamer, C. Harold Koon and the Historical Society of Schuylkill County, Pottsville; D. M. Bittle, Schuylkill Haven; Harry J. Poorbaugh, County Farm Agent; Nicholas Bervinchak, Minersville; the Philadelphia and Reading Coal and Iron Company, and Jim B. Hobbs, Tower City, for sketches.

Gratitude is also extended to Arthur H. Henninger, county superintendent of schools, and the school directors, superintendents and supervising principals of Schuylkill County school districts whose cooperation in the purchase of these books made the project possible.

H. E. H.

# CONTENTS

CHAP	PA	.GE
I.	THE FORMATION OF THE COUNTY	1
	"The Bloody Ground." The Regina Hartman Story. The Revolutionary War. Schuylkill County Created. The Discovery of Coal.	
II.	THE HISTORY OF ANTHRACITE COAL	9
	First Use of Coal. Coal and Iron Linked. The First Strike. Labor Unrest Begins. The Breaker Boys. The Rise of Unionism. The Bootleg Coal Era. Strip Mining. The Future of Anthracite. Cleaning the Schuylkill.	
III.	TRANSPORTATION	27
	The Schuylkill Canal. The Union Canal. The Schuylkill Rangers. Railroads. Birth and Death of Trolleys. Advent of Automobiles.	
IV.	SCHUYLKILL COUNTY IN WAR	44
	War With Mexico. The Civil War. The War Begins. The Battle of the Crater. The First Armored Car. The Farquhar Incident. The Spanish-American War. The Mexican Expedition. The First World War. World War. II.	
V.	INDUSTRY	63
	Powder For Revolution. The Iron Age. The Pioneer Furnace. County Income \$220.475,000. 35 Banks in County.	
VI.	EDUCATION	72
	Third of People Spoke German. "An Unnecessary Evil." Newspapers of Schuylkill County. Library History.	
VII.	EARLY CHURCHES OF THE COUNTY	84
VIII.	FARMING	88
IX.	THE COUNTY SEAT	94
	County Seat Moved. Indians Settled Near Pottsville. The Court House and Prison. The Neiman Massacre. Henry Clay's Monument.	
APPE	APPENDIX	



#### CHAPTER I

#### THE FORMATION OF THE COUNTY

Schuylkill County was created by legislative act in 1811, sixty years after its first permanent settlers crossed the Blue Mountain on its southern border to make their homes in a frontier where Indian massacres were among the dangers of pioneer life.

Made a part of Berks and Northampton Counties on its purchase from the Delaware Indians in 1749, the area that is now Schuylkill County had to give the blood of its pioneers to create the more stable era during which it was separated from the parent county and took a name from its presence at the headwaters of the Schuylkill River.

During the French and Indian War (1754 to 1763) Schuylkill County was a wilderness of marsh, swamp land, dense forests of pine, and the home of the wild beast and the Delaware Indians. It was sometimes called "St. Anthony's Wilderness" after Anthony Seifert, a Moravian missionary.

The Delawares and the other Indian tribes of Pennsylvania and New York were the allies of the French in France's ill-fated attempt to secure control of North America from the English.

They crossed the Susquehanna River in large numbers in the French campaign that followed the ambush and defeat of General Braddock's army in Western Pennsylvania July 9, 1755. For eight years yet-to-be-born Schuylkill County was in the area where Indians murdered, looted, and burned.

The Provincial Assembly, prodded by Governor

Robert Hunter Morris, provided for the fortification of the frontiers after a number of settlers had been killed and their homes burned in Indian raids north of the Blue Mountain. The frontier at that time extended from the Delaware River to the Maryland border. Forts were erected at intervals all along a natural defense line provided by the Blue Mountains.

Made of logs, the forts were manned by militia hastily recruited from among settlers in the Schuyl-kill region and what is now Berks County. Some of them had swivel guns. The garrisons sent out scouting parties to patrol the areas between forts. Although there were some raids south of the Blue Mountain by small bands of Indians, the forts served their purpose in preventing any large scale attacks on the settlers in what is now Berks County.

Forts Dietrich-Schneider, Lebanon, and Franklin were built to protect the routes over the Blue Mountain from the Schuylkill to the Berks and Northampton sides of the mountain.

## "The Bloody Ground"

The county was sparsely settled during the Indian war. Most of the settlers lived in the southern and southwestern areas. What they suffered at the hands of the Delawares gave the region the name of the 'Bloody Ground of Pennsylvania.'

On their raids the Indians descended the Tulpehocken or Sunbury trail from what is now Sunbury, to Hegins, over the Broad Mountain to the Blue Mountains at Pine Grove and down the Schuylkill Trail from Tuscarora to Port Clinton.

The Delawares frequently were joined by Shawanese and Nanticoke Indians in their marauding expeditions. Those who lost their lives in the first raids by these tribes had ignored a warning of Conrad Weiser, famed Berks County frontiersman and the Provincial Government's interpreter in prior dealings with the Indians.

One of the first massacres occurred near Pine Grove when Peter Grafe's wife and two children were killed on October 28, 1755. Two days later Henry Hartman, who lived west of Pine Grove, was scalped.

In a massacre at the inn of Valentine Baumgarten, where the Schuylkill County Institution District buildings now stand, a woman and a boy were killed and another boy was wounded.

Adam Johann Buss was surprised at his home at Deer Lake, he and his wife killed and their three children taken captive.

Indians attacked the mill of Peter Conrad near Landingville, burned it to the ground and murdered several members of the family.

The torch was put to the home of Johann Peter Schmelger at Molino and his three children were taken captive.

In December of 1756 Michael Ney was killed near Summit Station. He and his brother were ambushed by two Indians while gathering firewood. One Indian was being badly beaten by Michael when the other Indian came to his rescue and killed Ney. Michael's brother pretended he was dead, later crept away and warned his family.

Many of the settlers fled into Berks County in the wake of the raids, but erection of Fort Henry gave them some protection and they moved back. Pursuing forces had difficulty finding the Indians after the raids. One of their hiding places was the "Red Hole," a deep gap between Klingerstown and Fort Henry, four miles east of Pine Grove.

After the forts were built, the raids halted for a time. Abandonment of the forts after 1758 was followed by more Indian raids in 1763. On September 8 of that year, the Indians murdered four children of Nicholas Miller in the Long Run Valley. They returned the same day to John Fincher's mill in Schuylkill Haven and killed him, his wife, and two sons and captured his daughter. The Indians had burned Fincher's Mill in 1756, but the family escaped.

On the second raid one of Fincher's sons, escaping by leaping over the mill race, ran to soldiers stationed in the area for help. Rachel Fincher, one of the captives, was returned to her family at Carlisle in 1765 when the Indians released prisoners they had taken in the war.

## The Regina Hartman Story

One of the most moving accounts in history of the return of the Indian captives at Carlisle had as its principals the two survivors of an Indian massacre at Orwigsburg.

The result of a raid on the home of John Hartman in September of 1757—the reunion of a mother and daughter through a folk song the pioneer mother had crooned to her children at bedtime—was subsequently made the basis of historical stories by Elsie Singmaster, Hervey Allen, and other famous writers.

The historic incident had its beginning with Mrs. Hartman's escape from death because she and a son, Christian, were at a grist mill when their home was burned and the other male members of the family killed. The mother returned to find her husband and a son, George, dead and her two daughters, Barbara and Regina, missing.

Later she learned that both girls had been carried away by the Indians. Months later the body of Barbara was found several miles from the house. It was surmised that she had become exhausted and, unable to keep up with her captors, had been cruelly murdered.

Regina, the stronger of the two, escaping a similar fate, was taken to New York, where she lived as one of the tribe, becoming "Sawquehanna," the White Lily. Throughout her captivity, she later said, she and another white girl captive were continuously under guard of an old squaw.

With the end of the French and Indian War in 1765, Regina and other white children who had been captured were taken to Carlisle. After notice of the return of the prisoners was carried throughout Pennsylvania, Mrs. Hartman, who had never abandoned hope that Regina was alive, made the long journey to Carlisle. But the journey appeared to be in vain. Mrs. Hartman saw among the captives no one who resembled Regina. Living with the Indians, the children had taken on many of the characteristics of their captors and many had forgotten the language of their mothers and fathers.

Broken-hearted she was ready to abandon the quest when she remembered the German song she had sung to Regina and the other children. In a dry, cracked voice she sang the familiar words through the second line, when Regina, then 22, rushed to her with a cry.

## The Revolutionary War

Following the Battle of Lexington in the Revolutionary War, the townships of Pennsylvania each were called upon to raise a company of militia. From that portion of Berks County, which is now Schuylkill,

Captain Jacob Whetstone's Company from Pine Grove, Captain Minick's Company from Brunswick, the Bretz Company from Pine Grove, and the Captain Cristoff Baldi Company from Brunswick Township entered the War for Independence.

During the Revolution Schuylkill settlers again had trouble with the Indians, for a large extent of what is now the county was controlled by savages. Militiamen established a frontier line to protect the southern Schuylkill Valley from attacks of the English and the Indians who threatened to cut down the Susquehanna Valley if successful in their campaign in New York State. The Indians were driven beyond the Blue Mountains in the late stages of the war and never returned.

# Schuylkill County Created

At the beginning of the nineteenth century since Schuylkill County pioneers were far from the seat of justice and the public offices in lower Berks County, it was almost impossible for them to descend from the mountains to attend the court sessions.

By 1811, the territory between the Blue Mountain and the Second Mountain was widely settled and new settlers had pushed into the wilderness beyond Second Mountain.

An act for erecting a separate county, to be called Schuylkill, was approved by Governor Snyder on March 18, 1811. The new county consisted of the townships of Brunswick, Schuylkill, Manheim, Norwegian, Upper and Lower Mahantongo and Pine Grove in Berks County and of West Penn and Rush Townships in Northampton County. It was not until March 3, 1818 that some additional territory was annexed to Schuylkill County from Columbia and Luzerne counties.

While the county had been growing to its present population of almost 220,000, repeated efforts were made to carve it up—all without success.

Had the legislature adopted the various plans presented for splitting up Schuylkill County, the county would now consist of a narrow strip of land between Broad and Sharp Mountains; there would be county seats within eight miles of each other, and instead of one court house in Pottsville, there would be courthouses in Pottsville, in the Tamaqua area, one south of Sharp Mountain, and one north of Broad Mountain.

## The Discovery of Coal

The most important factor in the growth of the county following its formation was development of the wealth buried in the ground in the form of coal.

Although Necho Allen, a timberman, is credited with the discovery of coal in the county in 1790, its presence must have been suspected prior to 1770. Scull's map, published in that year, indicated deposits of coal at both the headwaters of the Schuylkill River and Swatara Creek.

Samuel Potts, General Arthur St. Clair and others, who owned extensive tracts in what is now Pottsville and adjacent areas, are believed to have known of the existence of coal prior to Necho Allen's time.

Necho Allen is said to have come from Vermont. He was known as the "Black Yankee." Cruising in the mountains for timber, he encamped under a ledge at the foot of Broad Mountain and built a fire. He was awakened by a sensation of great heat and light shining in his eyes. Allen first thought the

mountain was on fire but, on investigation by daylight, he discovered his campfire had ignited an outcropping of coal.

He never profited by his discovery. After spending considerable time emphasizing the value of anthracite, he left the region in disgust.

One account says he later accidently drowned in Lake Champlain. Another claims he was drowned in a freshet in the Mahanoy Creek.

#### CHAPTER II

# THE HISTORY OF ANTHRACITE COAL

The flames generated in a Broad Mountain coal outcropping by Necho Allen's campfire back in 1790 have long since been fanned into a gigantic industrial empire. It is an empire that—thanks to benevolent Mother Nature—faces no danger of extinction for many generations to come.

The history of Schuylkill County is largely a history of the anthracite industry, and as such it is more or less a commentary on the economic life of the region since the end of the eighteenth century. Although Schuylkill County is not alone in having anthracite deposits, it was in this county that coal was first discovered and mined for industrial use. And it is here in Schuylkill County that the largest unmined anthracite reserves remain.

In a century and a half following discovery of coal, the anthracite industry expanded from production of a few wagon-loads of anthracite to a point where more than a million tons could be produced in a week.

Hand-in-hand with the expansion of the anthracite industry went the building of canals, highways, and railroads which opened the county to extensive settlement, provided an outlet for the county's chief product, and attracted investments in a new industry.

Like many great discoveries, anthracite was not readily accepted by a skeptical public. Those who first tried to sell "black rocks" in Philadelphia were greeted with ridicule when they attempted to prove the "rocks" were combustible.



MINE MULES

Nicholas Bervinchak's drawing of mine mules at Lytle Colliery.

The region which produced the "black rocks" was part of that sold by the Indians a half a century before for \$2500. The purchase included the lands between Mahanoy Creek, on the east side of the Susquehanna River, and the Delaware north of the Blue Mountain and embraced whole or parts of Dauphin, Schuylkill, Northumberland, Columbia, Luzerne, Monroe, Carbon, and Pike counties.

To the Indians who sold the 3,750 square mile area, the transaction appeared to be a good bargain on their part. They could not have forseen that the ground in this relatively small area was to produce enormous wealth.

The wealth was in the coal formed from the vegetable debris of prehistoric jungle growths. These partially decayed masses of matter, protected from the air and buried beneath a stupendous weight of over-lying sediment, were gradually transformed by heat and pressure into coal. It has been estimated by geologists that from five to eight feet of compact

vegetable debris were required to form one foot of coal. Since the Mammoth Vein in Schuylkill County is fifty feet thick, this means a deposit of compact vegetable debris almost 400 feet in depth was necessary to create this vein.

The coal area of the county covers 210 square miles. Two thirds of the deposits are in the Southern Field extending west from Mauch Chunk until it subsides into two prongs, one reaching to Wiconisco in Dauphin County and the other one to Dauphin, six miles from the Susquehanna. The Southern Field is bounded on the north by the Broad Mountain and on the south by Sharp Mountain. It is 40 miles long and from two to five miles wide.

The portion of the Middle Field in the county is north of the Broad Mountain, extending 20 miles east from Ashland. Its other boundary is the Mahanoy Mountain.

## First Use of Coal

Five years after Necho Allen's discovery of coal, a blacksmith named Whetstone successfully used anthracite in his forge for smithing purposes. It was many years before hard coal was accepted as a household fuel. Its hardness and the difficulty of igniting, compared with wood, prejudiced most people against it. Then, too, wood was plentiful and cheap. It was erroneously believed that an artificial blast was required to produce combustion of coal.

William Morris, of Pottsville, introduced anthracite to the outside world, not very successfully. He sent a wagon load of coal to Philadelphia in 1800 but was unable to sell it. Disheartened, he sold his lands and abandoned mining.

The first successful attempt to introduce anthracite in the Philadelphia market and was made in 1812

by Colonel George Shoemaker who loaded nine wagons of coal from his mines at Centreville, near Pottsville, and hauled them to Philadelphia for sale. The people denounced him as a swindler and impostor for attempting to sell "black rocks."

He succeeded in selling two wagon loads for the cost of transportation and gave away the other seven wagon loads. The owners of a rolling mill in Delaware County, after some persuasion by Shoemaker, agreed to try it in one of their furnaces.

The foreman of the mill did not want to put stones in the furnace but the mill owner and Colonel Shoemaker decided to experiment themselves before the mill workers arrived for work in the morning.

They kindled a fire with wood and placed coal on it. They left it to eat breakfast and on their return found the furnace in a perfect glow of white heat. The iron was put in and heated in much less time than usual and passed through the rolls like lead.

Thus was established to the outside world the fact that Schuylkill County's "black rocks" were combustible.

#### Coal and Iron Linked

Use of anthracite as a fuel was given considerable impetus when William Lyman, of Boston, successfully used coal in smelting operations in the Pioneer Furnace, Pottsville, in 1839—the first of the iron makers to qualify for a \$5,000 prize that had been offered by a Philadelphia financier, Nicholas Biddle, for such an experiment. A previous effort had been made by F. W. Geisenheimer at the Valley Furnace near Cumbola in 1833 and although Geisenheimer smelted iron, it was held that he did not achieve practical results.

In celebration of this triumphant event, Biddle

gave one of history's most memorable toasts to the hard coal region, "Oh, Pennsylvania, her sons like her soil, a rough outside but solid within—plenty of coal to warm her friends—plenty of iron to cool her enemies."

The coal trade was really established with the first shipment of anthracite on the Schuylkill Canal in 1822. That year 1,480 tons were carried in boats on the new artery of commerce.

In the early years of the coal trade, this region became the scene of wild speculation. There was a rush to the new El Dorado by capitalists, adventurers and fortune hunters. Pottsville, the center of it, over-flowed with strangers. They slept on floors of crowded taverns. The demand for houses became so great that



SOLDIERS AT THE MINES

Soldiers were sent to the mining fields during the 1902 strike to prevent disturbances. This scene was taken at a mine near Shenandoah.

lumber was framed in Philadelphia and sent by canal to the coal region—America's first prefabricated housing. The canal presented the spectacle of a city coming up it on boats.

The mountains were scarred by pits and trial shafts sunk by prospectors. Many of the miners had no knowledge of where the coal measures were and dug nothing. Others were lucky and made fortunes, if not in coal, then in land speculation.

Six months after the boom began in 1828, \$5,000,000 had been invested in Schuylkill County coal lands. Some properties which had been sold in 1827 for \$500 were re-sold in 1829 for \$16,000.

The mining operations of these early days were conducted in a most primitive manner—its techniques repeated a century later when a depression produced coal "bootlegging." The first operators sank pits on an elevated position, from which the coal was hoisted in buckets. When it became difficult to hoist water from a depth of 30 to 40 feet, the pit was abandoned and another one started.

The operators, intelligent and enterprising men, soon discovered the advantages of opening the veins from ravines or at the foot of hills through drifts. Railroads laid in gangways soon replaced wheelbarrows, and horses and mules were used to pull the coal cars from the mines.

The only preparation given the coal was removal of slate and dirt before it was transported to the canal in wagons. But with Abraham Pott's construction of a railroad from his mine to the head of the canal, coal transportation was put on rails.

Soon railroads—consisting of cars pulled along wooden rails by oxen, horses, or mules—were hauling coal from all mines in the region to the canal.

From 1825 to 1829 coal shipments rose from 6,300 tons to 79,973 tons and the price per ton at Pottsville dropped from \$3.08 to \$2.52.

With the beginning of 1830, however, the operators felt they faced a rosy future. The superiority of anthracite as a fuel for domestic heating, for manufacturing, and for steam generating purposes was gaining recognition. But a delay in the beginning of navigation on the canal in the spring and an increase of 10,001 tons in production over the previous year resulted in an overstocked market which produced anthracite's first of a long series of reverses in 1831. The market was brought down by an excess of 50,000 tons. Miners' wages were reduced to \$1 per day, laborers' to 82 cents.

But the low price of coal had its effect, too. Demand for household consumption became unprecedented in the fall and miners and boatmen could not be hired fast enough to transport sufficient coal to market.

Periodic reverses in the next several years were met despite expansion. Attempts to have the State Legislature regulate the coal industry, a boatmen's strike in 1835, and weather conditions were responsible for ups and downs of the coal business. During this period Colonel John M. Crossland, a Pottsville boat builder, pioneered a direct Pottsville-to-New York haulage of coal by water without trans-shipment. His feat opened increased markets for the anthracite region.

By 1842 the county's population engaged in or dependent on the coal trade numbered 17,000. Of the thirty steam engines then in use, 22 were manufactured in the county.

A new era in the coal trade was opened that year when the first locomotive engine and passenger train

completed its run from Philadelphia to Mount Carbon.

The immediate effect was competition between the canal and railroad for the coal freight business. The long range effect was the forcing of the canal out of business.

#### The First Strike

The first recorded industrial dispute involving mine workers also occurred in 1842, when 1,500 workers conducted a strike meeting at Minersville and then descended on Pottsville, where a demonstration was staged. After several weeks of idleness, marked by acts of violence, the miners willingly accepted work on any terms.

The first anthracite breaker was introduced in 1844 to remedy a problem that had worried operators. Many of the mine owners were losing money even on large production because only lump-size coal was thought to be acceptable for sale and all other sizes were discarded.

After considerable experiment it was found that broken and screened coal commanded a higher price and a new method for merchandising anthracite began. At first this new development was slow, wasteful, expensive, and laborious. Hammers were used to break the large lumps after which the coal was shoveled into a revolving screen to remove the dirt, and then shoveled into barrows and dumped into the cars for transportation to the canal wharves, where it was again screened and sorted into various sizes.

The first breaker, after the patent of Joseph Batten, of Philadelphia, was erected as an experiment at the Gideon Bast colliery on Wolf Creek, near Minersville. It was an improvement that was soon generally accepted throughout the coal regions.

Driven by a steam engine, the machinery consisted of two or more cast-iron rollers with projecting teeth, revolving toward each other, through which the coal was passed. Thus broken, the coal went into revolving circular screens which separated the various sizes and dropped the coal into a set of chutes. The raising of a gate dropped the coal from chute to railway cars.

Although the coal operators had few profitable years in the decade prior to 1850, other interests in the region which were dependent on the coal trade flourished and prospered. The evidence of this prosperity is an increase in Schuylkill County's population from 29,072 in 1840 to 60,713 in 1850.

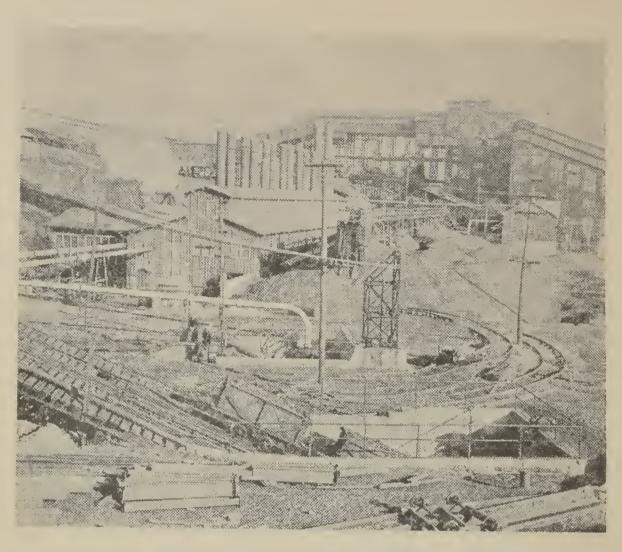
In 1854 the county was prosperous, however, and coal was selling at \$3.50 a ton. Other prices were "high" for those times too. Pork was  $10\frac{I}{2}$  cents a pound and beef 12 cents a pound.

During this prosperous era the first perpendicular shaft in the county was sunk at the Carey mine in St. Clair. The shaft demonstrated that the great white ash coal veins of the Mine Hill and Broad Mountain ranges were under the red ash veins then being mined and that the deeper veins could be mined by this new method.

Completion of an extension of the Mine Hill and Schuylkill Haven Railroad to the Mahanoy coal field at Ashland was made in 1854. Extensive mining of the great coal measures north of the Broad Mountain had begun in 1852.

#### Labor Unrest Begins

Labor unrest became common in the anthracite industry after 1860, marked by strikes and violence. The miners sought an eight-hour-day instead of the 10-hour-day then in effect. Their efforts failed on two occasions. On the second the Workingmen's



WEST SHENANDOAH COLLIERY ... THEN

Typical of anthracite breakers before centralization was West Shenandoah colliery. The photographs show the breaker and boiler plant in the background and slope, columnway and power cable support in the foreground.

Benevolent Association promoted a four-months suspension of work in 1869. It proved the value of unionism for increased pay rates were won by the miners.

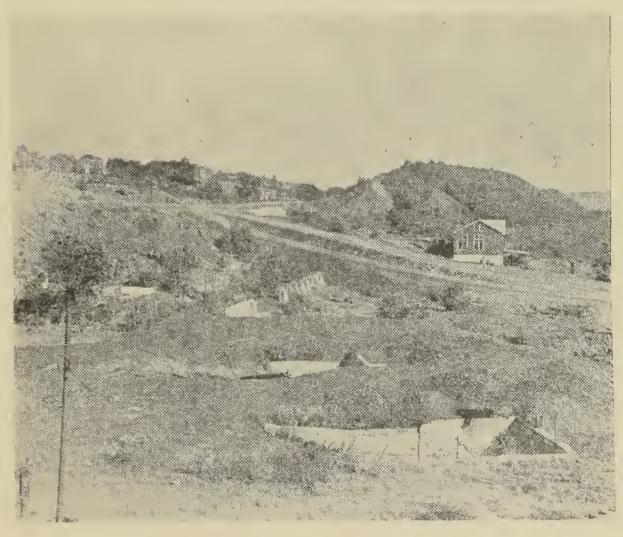
During this period the coal carriers entered the coal-mining business to insure a steady source of supply for their roads. Notable among them was the subsidiary Philadelphia and Reading Coal and Iron Company formed by the Philadelphia and Reading Railroad Company with the purchase of 70,000 acres of coal lands in Schuylkill County which then was expected to supply the railroad company with all the fuel it could transport for centuries to come.

Despite the effects on coal sales of economic

conditions, including panics of the last half of the 19th century and labor strife, the anthracite industry increased its output of 14,172,004 tons with 35,600 employes in 1870 to an all-time high of 100,445,299 tons with 156,148 employes in 1917.

While production of coal showed tremendous gains in this half century, mining methods remained fundamentally unchanged until electricity and other modern devices were introduced into mines in the second decade of the 20th century.

Safety lamps and other equipment were put to use in the mines and the state legislature passed many laws which began to cut down mine accidents and fatalities.



WEST SHENANDOAH . . . TODAY

Only concrete stumps and desolation today mark the spot where West Shenandoah colliery once stood. The many P. & R. C. & I. Co. breakers which once dotted the county have given way to modern, central breakers.

The mining techniques underground are still the same though conveyor belts have eliminated in many mines the practice of loading buggies and pushing them by hand to a main chute to be loaded into mine cars, and electric motors have almost entirely supplanted the mule and horse-power formerly so necessary in mining operations. One coal company which used 2,500 mules now has but 50.

Drills and jack-hammers and improved blasting devices have eliminated much of a miner's back-breaking toil. Coal-cutting machines, tried successfully in the soft coal fields, have not yet been perfected to deal with the steep pitch of anthracite coal veins.

Electrification of the mines has permitted miners to dig deeper into the earth and recover valuable coal that could not be secured in the early days of mining. Huge electrically-driven pumps keep the underground mining areas de-watered and tremendous fans, also powered by electricity, insure a steady flow of fresh air to miners deep in the earth.

In 1925 a new principle of driving gangways introduced at Wadesville colliery made mining safer and more economical. Gangways, formerly driven through the coal veins themselves, were driven through rock adjacent to the veins and then cut off at right angles at intervals into the coal veins. The tunnel through rock is more substantial and needs less maintenance.

The present concrete and steel breakers are powered with electricity instead of the steam power of the old structures. Central breakers, costing several million dollars, have been erected to process coal from several mine operations that previously had their own breakers. Before the large breakers were built, the standard size could prepare only 2,500 tons of coal

in nine to ten hours. The central breakers can prepare more than 10,000 tons in seven hours.

# The Breaker Boy's

Just as electricity and conveyor belts eliminated mules, so have modern breakers eliminated the "breaker boys." Usually of tender age, these boys picked the slate and rock from the coal by hand after it was sized by screens.

Introduction of a process of cleaning coal whereby a gravity mixture sent rock and slate to the bottom of a tank and kept the coal floating on top, eliminated the necessity of picking slate.

These new coal cleaning methods and development of stokers and forced draft furnaces in industrial plants have resulted in use of much of the fine size coal that was formerly discarded as waste.

# The Rise of Unionism

Working conditions of the miners did not change as rapidly as production methods. Their better lot dates back to the beginning of the 20th century.

As late as 1863 the miners earned from \$7.50 to \$18 a week at long hours of toil and without the benefit of a union to fight their battle for improved conditions and pay. An attempt had been made at unionization in 1848 when the Bates Union was organized in the Schuylkill field, but the union was wrecked two years later. During the short life of the organization a strike was begun to limit production, increase the price of anthracite and put labor in a better position to secure higher wages.

The first real show of unionism in the county came with the chartering of the Workingmen's Benevolent Association on July 23, 1868, with John Siney,

of St. Clair, as its president. This organization was the forerunner of the present powerful United Mine Workers of America. Siney has been credited with doing much to lay the groundwork for the prestige since attained by the U. M. W. A.

For several years the Workingmen's Benevolent Association was able to dictate terms and prices to the mine owners, but a strike in 1871 that ended in victory for the operators marked the beginning of the end of the influence of the Association. The Schuylkill branch of the union continued in existence until 1875, when it became utterly demoralized by a five months' strike in the Schuylkill field that was not joined by the northern field.

The Miners and Laborers Benevolent Association and the Knights of Labor were also organized after the dissolution of the Workingmen's Benevolent Association, but their power, too, was soon broken by losses in strikes.

The failure of these unions to achieve their purposes was due to the fact that time after time when a strike was called for the entire industry, work would continue in one coal field, while workers in an other remained idle. This lack of solidarity was remedied upon the formation of the United Mine Workers of America in a convention of mine workers called at Hazleton in 1900.

Mine operators ignored an invitation to attend and discuss grievances. John Mitchell, president of the U. M. W. A., thereupon ordered a general strike effective September 17, 1900. Two weeks later no miners were working and 40 days later the miners received a 10 per cent wage increase.

The strength the new union gained in its first success was tested again in 1902 when Mitchell again called a strike after operators had refused demands

for a wage increase, a shorter day, and a contract. This became the "Great Strike of 1902," that lasted 165 days.

President Theodore Roosevelt then appointed an Anthracite Coal Strike Commission to arbitrate the issues. The Commission recommended wage increases and a nine-hour day. It also formed the Anthracite Board of Conciliation which to this day has provided an orderly method for the adjustment of grievances arising during the term of a wage agreement.

The longest strike began September 1, 1925 and ended 170 days later. It won no wage increase but did gain other important concessions. The eight-hour day was won in the 1916 contract and the seven-hour day, five-day week in 1936.

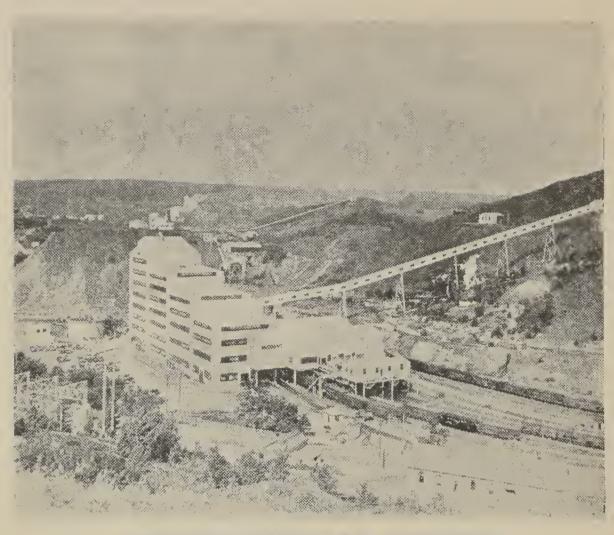
Currently the miners get \$100 annual vacation pay and have a welfare and pension fund maintained by royalty payments on each ton of coal.

In Schuylkill County the United Mine Workers now have a membership of 20,000 men.

# The "Bootleg" Coal Era

"Bootlegging" of coal—a term used to describe crude unauthorized mining by unemployed men on lands of coal companies—was an outgrowth of a nation-wide depression that began in 1929 and continued in Schuylkill County for a decade.

It began with the closing of many collieries and the screening of coal from refuse banks by unemployed miners—a practice that was at first condoned by the coal companies. Soon the miners were digging shafts into the ground and selling the coal they brought up from the earth. Working with almost the same tools as did several generations of ancestors



#### MODERN ANTHRACITE BREAKER

The St. Nicholas Central Breaker of the Philadelphia and Reading Coal and Iron Company is the world's largest anthracite preparation plant.

before them, they spent long hours in gruelling labor for small returns.

Men unskilled in mining saw in the new practice a way to make a living. But with their entry into this hazardous occupation, the casualty rate soared. Men were killed daily through being entombed in the crude workings.

During 1931, the first year of bootlegging, it was estimated that 150,000 tons of coal were mined by the "bootleggers." Production reached 1,000,000 tons in 1935 and 7,000,000 tons in 1940.

The legislature in 1941 passed a law providing for the supervision of bootlegging. Many of these miners began paying royalties to land owners and became independent operators. The workings are now inspected by state mine inspectors. Most of the present independent operations are in the western section of the county.

A state survey of the industry in 1941 disclosed 3,006 small mines being operated. By 1949 the number had declined to 830. Employment in them dropped from 10,762 in 1941 to 2,617 in 1949.

#### Strip Mining

Another new phase of anthracite mining—stripping the earth from the surface to uncover coal veins and then removing it with the use of giant shovels—has come into prominence in the past quarter century.

In 1925 a total of 1,578,478 tons of anthracite were mined by this method. Strip-mined coal represented 2.55 per cent of the industry's entire output.

By 1948 strip mining was accounting for 13,352, 874 tons—one third of the 37,112,967 tons mined underground that year.

#### The Future of Anthracite

Schuylkill County will probably become the exclusive center of anthracite mining in Pennsylvania with depletion of coal reserves in the northern and middle fields.

Before much of the rich coal reserves in Schuyl-kill County can be recovered, however, steps will have to be taken to drain water from mines by other than the pumping methods now used. This pumping is too costly for operators to open new deep-mining operations on a large scale.

Mining engineers have proposed that huge central drainage tunnels carry this mine water away.

# Cleaning the Schuylkill

For one phase of anthracite mining, the Commonwealth of Pennsylvania is attempting to turn the clock back to the 19th century. The attempt is the \$35,000,000 desilting project now nearing completion along the Schuylkill River.

Huge basins are being built at Auburn and farther down the river to catch the silt that was poured into the river from mining operations since washing of coal began in 1894. Silt that settled in the past years is being dredged from the river. Collieries are at present forbidden to let silt be washed into streams feeding the Schuylkill.

The anthracite industry, grappling with problems of new utilization of coal and some use for its by-products, looks to the U. S. Bureau of Mines laboratory at Schuylkill Haven for the research that will solve these problems. Construction on the laboratory, financed with federal funds, began in 1949.

#### CHAPTER III

#### TRANSPORTATION

Four major railroads and the 37,000 vehicles traveling over 670 miles of state-maintained high-ways in Schuylkill County are the outgrowth of a transportation system which had a crude beginning with rafts of timber floated down the Schuylkill River and Swatara Creek to markets at Reading and other communities on the lower Schuylkill.

Waggoners operating over the Centre Turnpike from Philadelphia to Sunbury, boatmen on the Schuylkill and Union canals, and the stage coaches which operated here as well as on the western plains all played their part in the pioneer transportation of the county before the advent of the "Iron Horse."

Thick stands of pine and hemlock trees which once covered the mountains of Schuylkill County brought the first settlers here and led to their use of the Schuylkill River in sending the valuable timber to sawmills farther down the river. The giant pines produced masts for the navies of France and the Colonies during the Revolutionary War. The files of the Continental Navy disclose that a captain of Marines was sent to a point where Mount Carbon now stands with a party of men in 1780 to superintend cutting of masts.

The men who manned the timber rafts could travel from Pottsville to Reading in seven hours by riding a Spring "freshet." They sold their timber to lumber merchants between Reading and Manayunk. The digging of the Schuylkill Canal ended their unique occupation. But the early loggers, by

their settlements, hastened the discovery of coal deposits and the subsequent growth of Schuylkill County.

The Centre Turnpike, the first real road through the county, was opened from Sunbury to Reading in 1809, but it was not until 1812 that the turnpike was considered completed. It followed along the greater portion of its length the route surveyed for the "King's Highway" in 1770 from Philadelphia to Fort Augusta (Sunbury) on the Susquehanna River. Despite its high-sounding name, "King's Highway" was nothing more than an improved Indian trail on which travelers could pass on horseback.

Travelers on the turnpike in 1811 had to pay a toll just as travelers on the Pennsylvania Turnpike must pay one now. It entered Schuylkill County at Port Clinton and then traversed Brunswick, North Manheim, Norwegian, New Castle and Butler townships. Over it a weekly stage carried passengers and mail between Philadelphia and Sunbury when it was first opened. By 1829, three daily stage lines were operating through the county which continued until near the middle of the 19th century when railroads inaugurated passenger service.

The commerce over the road was in heavy wagons pulled by four to six horses and carrying 2 to  $2\frac{1}{2}$  tons. When the teamsters came to a steep grade, they cut small trees and tied them behind the wagons for braking in making the descent.

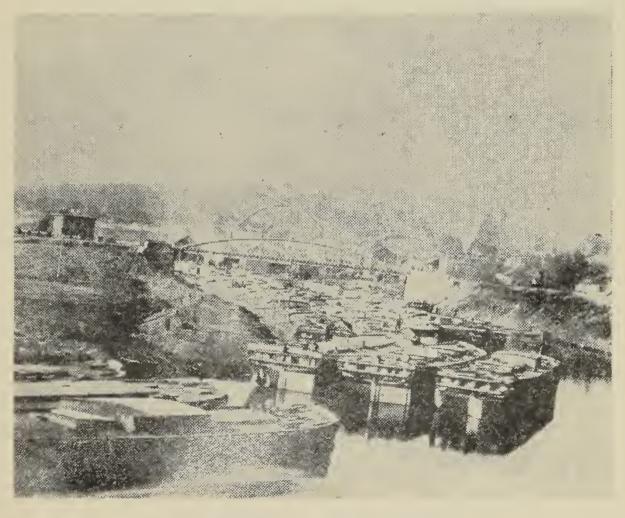
The wagons still hauled goods over the turnpike after the opening of the Schuylkill Canal. Traffic from the head of the canal to the Susquehanna River was heavy until railroad communication was established between Schuylkill and Northumberland counties.

Tolls on the Center Turnpike paid its cost and

gave dividends to stockholders. In 1879, when the railroads were firmly established and the Schuylkill Canal was nearing the end of its usefulness, travellers on the road still were paying a fee. A toll was charged on a bridge at Mount Carbon which the court had ruled unsafe. The Centre Turnpike Company put up a toll gate for the announced intention of meeting the expenses of bridge repairs.

# The Schuylkill Canal

The Schuylkill Canal, built at a cost of \$13,-000,000 and 108 miles long, was constructed as part of a state-wide system of waterways for commerce between the seaport of Philadelphia and the interior. Coal did not become an important commodity until



#### CLUSTERS OF CANAL BOATS

Dam No. 7 at Schuylkill Haven was choked with canal boats when this picture was taken in the 1880's. The railroads had already taken much of the coal business from the canal but there was still active traffic on the old waterway.

well after the establishment of the Schuylkill Canal and slack water route from Mount Carbon to Philadelphia.

When boats first went the entire length of the canal in 1824, Abraham Pott, a pioneer coal operator, took 28 tons of coal to Philadelphia, and upon offering to pay a toll at Reading found the rate was fixed for everything down to a bushel of hickory nuts, but coal was not on the toll list.

Both the Schuylkill and the Union Canal, which opened in 1830, were victims of disastrous floods in 1850, and although they operated thereafter, the financial loss incurred in destruction of dams and locks was more than they could weather. The losses, coupled with the competition of railroads as coal haulers, hastened the end of water commerce in Schuylkill County.

The Schuylkill Navigation Company, which operated the Schuylkill Canal, was incorporated in 1815. The first dam was built at Mount Carbon in 1817 and the canal was navigable from Mount Carbon to Schuylkill Haven that year. Floods delayed completion of the canal until 1824 when boats first went from Mount Carbon to Philadelphia—a six weeks' journey. No towpaths for mules to pull boats were provided at the start of operations and the first boats were pulled by men, using breast bars and long tow lines.

In 1828 navigation was completed to the mouth of Mill Creek at Port Carbon. The size of boats was gradually increased from 28 to 30 tons, to 80 tons and then to 200.

In 1842 when the Philadelphia and Reading Railroad entered Mount Carbon to furnish a rail outlet for the coal trade, the canal took 500,000 tons of coal to markets at Philadelphia, Havre de Grace,

and New York. A few years before its abandonment—in 1881—the Schuylkill Canal carried 2,000,000 tons of freight in a year.

Following the disastrous floods of 1850 which wrecked the Tumbling Run reservoir, built to furnish water for the canal, canal houses and locks, the Port Carbon dam and its coal wharves were abandoned—in 1853. Palo Alto continued as the terminus of navigation until 1872 when all shipments of coal above Schuylkill Haven ceased. Cargoes of ore from Cornwall were still carried to the Atkins Furnace at Pottsville by canal boat for a year or two longer, but the boat crews had to "lock" their own boats as no lock tenders were on duty.

The canal in its heyday—from 1855 to 1867—transported 15,003,500 tons. During that period 1,400 boats were operated on the waterway. The canal company at its main loading points in Schuyl-kill Haven operated locomotive and repair shops to service the 3,400 railroad cars engaged in bringing coal from the terminus of the Mine Hill Railroad to the canal basin.

Half of the tonnage produced in the 1855-67 period went to New York. Canal boats were towed up the Delaware River to Bordentown after arriving in Philadelphia. They entered the Delaware and Raritan Canal to take their cargoes to New Brunswick, the Raritan River and Raritan Bay, thence to New York.

One of the wonders of the canal—an engineering feat in itself—was a tunnel through a hill near Landingville, the first tunnel driven in North America. Begun in 1818 it was finished in 1821. The tunnel was 450 feet long and 75 feet from one end of its arch to the other.

It was gradually reduced in length and enlarged



THE RAILROAD SUPPLANTS THE CANAL

This scene at Connor's Crossing north of Schuylkill Haven shows the placid, deserted waters of the old Schuylkill Canal. At the right is the stone work of the Pennsylvania Railroad arch as the P. R. R. pushed into Schuylkill County in the 1880's.

in height and width. Finally, in 1855-56, it disappeared altogether and the route of the canal was through a "cut" in the hill. Still known as the "Tunnel Dam," the spot is one of the few along the old canal route where fish may still be found.

An agreement between the Philadelphia and Reading Railroad and the Canal Company to divide coal tonnage in 1864 was followed in a few years by leasing of the canal for 999 years by the railroad. The cycle was completed when the Reading Company in 1947 turned over all of the old canal right-of-way to the Commonwealth of Pennsylvania.

The canal has long since fallen into disuse and few traces of it still remain in the county. Although

the last boat — the "Captain N. Byrnes" — left Schuylkill Haven in the spring of 1888, shipments from Schuylkill Haven were halted in 1887. Captain Daniel Cole, of Mount Carbon, who took the last boat out, was too late starting in the preceding fall and his boat was frozen in the canal until spring.

As late as 1915 approximately 30 boats were still operating on the canal out of Port Clinton. Since then the sound of a boatman's horn signalling the lock tender to ready his locks for passage of a boat has not been heard in Schuylkill County.

#### The Union Canal

The Union Canal, over which the first boat passed from Pine Grove to Philadelphia in 1830, connected with the Susquehanna River by way of the Susquehanna Canal at Middletown and the Schuylkill Canal, through a connection at Reading.

Production of the early mines along the Swatara Creek eventually reached the Schuylkill Canal by this route.

The canal survived earlier floods, but when the "Big Dam," the main feeder, burst in 1862, it destroyed the Pine Grove branch of the canal and it was never rebuilt.

The "Big Dam" covered over 700 acres at the present site of Sweet Arrow Lake.

Boats continued to run on the portion of the canal from Middletown to Reading but the right-of-way of the Pine Grove branch was sold to the Philadelphia and Reading Railroad. In 1868 a railroad from Pine Grove to Lebanon took the place of the canal.

# The Schuylkill Rangers

Rangers in the early history of Pennsylvania was a name applied to those used in scouting and defending the colonies along the frontier.

But the "Schuylkill Rangers" were of a different stripe; they were bandits and murderers—the pirates of the Schuylkill Canal.

The Rangers originated in Philadelphia, the terminus of the canal. Like the pirates of old, they would seize a boat, murder the crew, and take the contents of the boat as loot.

Historians have been unable to uncover direct evidence that the Rangers were an organized group of canal desperadoes. But between 1840 and 1860, they spread their reign of terror all along the canal from Philadelphia to Pottsville.

Peter Berger, of Schuylkill Haven, shot two Rangers who attempted to board his boat, "The Rattlesnake." The mayor of Philadelphia presented Berger with a revolver for the feat.

Not content with piracy, the Rangers robbed houses and farms along the Schuylkill. Once they tried to "capture" Schuylkill Haven. The citizens of the town drove them into a covered bridge and started a cross-fire. When one Ranger was killed, the rest surrendered. Tied with ropes, the canal pirates were taken to jail at Orwigsburg.

Berger and fellow Schuylkill Countian Edward Heiser were attacked by Rangers on another occasion on Vine Street in Philadelphia. Again Berger killed a Ranger and was taken before a Philadelphia magistrate who admonished him for not killing more.

During the 1850's Rangers created a disturbance during the midst of a July 4 celebration in Pottsville.

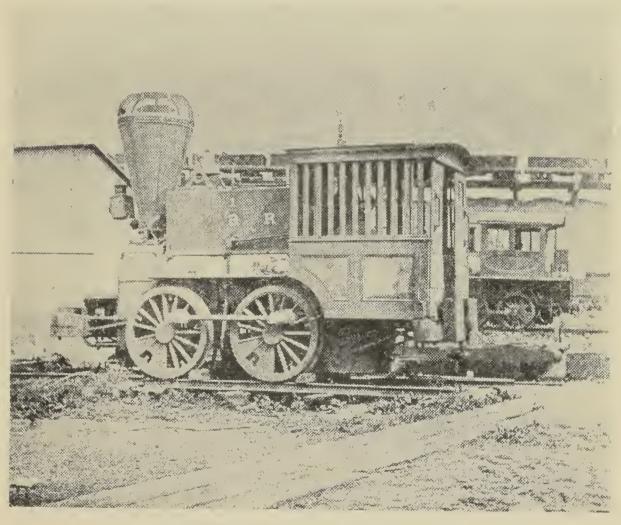
The leader evaded the police by running toward a boat yard at the foot of Union Street. He was overtaken by Nick Wynkoop, of Pottsville, who, armed with a gun, gave chase on his horse.

Charles Baber, a leading citizen of Pottsville, said at the time, "No one in Pottsville can go about after dark unless armed with pistols."

In Philadelphia the Rangers killed so many police that the people lived in terror.

#### Railroads

The third railroad to be built in the United States was a half mile stretch of wooden rails from a junction of Mill Creek in Port Carbon and the



#### FIRST RAILROAD ENGINE

This ancient engine was the first to be put into use on the Philadelphia and Reading Railroad between Pottsville and Philadelphia.

Schuylkill River to a mine operated by Abraham Pott.

Begun in 1826 and completed in 1827, it was the first to use drop bottoms on cars to unload coal for trans-shipment on the Schuylkill Canal. The cars were drawn by horses.

Railroads mushroomed throughout the county in the following decade. Five were in operation, their cars pulled by horses, in 1828. They were the Schuylkill Valley Railroad, beginning at the head of the Schuylkill Canal in Port Carbon and running ten miles to Tuscarora with branches intersecting at 15 mines; the Mill Creek, extending from Port Carbon four miles up Mill Creek Valley; the Mine Hill and Schuylkill Haven, terminating at Broad Mountain, 15 miles in length and with five miles of branch lines; the Mount Carbon Railroad, extending up the east and west branches of Norwegian Creek for seven miles, and the Little Schuylkill Railroad, running 20 miles from Port Clinton to Tamaqua.

The first locomotive made its appearance in Schuylkill County in 1833. Brought from Liverpool, England, by way of Philadelphia, it was hauled to Port Clinton on a wagon designed for hauling marble and pulled by 16 horses. On a trial run on the Schuylkill Railroad, the superstructure of the railroad was found to be too light for the engine spread the rails and ran into the river.

By 1842, 2,400 railroad cars were in operation over 105 miles of tracks compared with 1,750 boats in use on the canal.

What was to become the principal avenue to market of Schuylkill County's coal long before the end of the 19th century was opened January 1, 1842, when the first locomotive engine and passenger train of the Philadelphia and Reading Railroad (now the

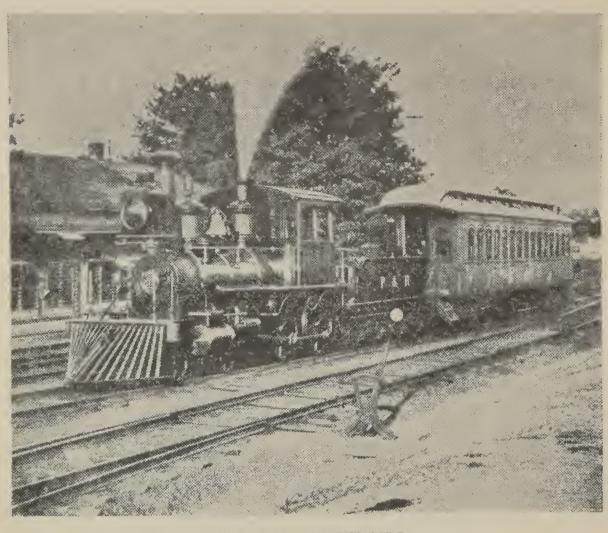
Reading Company) reached Mount Carbon from Philadelphia. The Mine Hill and Schuylkill Haven Railroad was put in condition for passage of the Philadelphia and Reading locomotive-drawn cars. Gradually horse-power railroads gave way to steam.

The railroad belt that had encircled lower Schuylkill County was extended to Ashland in 1854 when the Mine Hill and Schuylkill Haven extended its line there—the first rail penetration of the great Mahanoy coal field. Nearly a score of railroads, all absorbed in later years by their bigger rivals, followed the pioneer lines. The Mahanoy and Broad Mountain, Shamokin Valley and Pottsville, Union Canal Railroad (the first chartered in the county in 1826), Catawissa, Mountain Link, Swatara and Good Spring Creek, Schuylkill and Susquehanna, East Mahanoy, Lehigh and Mahanoy, Nesquehoning Valley, People's Railway, and the Danville and Pottsville railroads were among them.

Construction of planes—the first practical method of crossing mountains with railroads — marked some brilliant engineering on the railroads of the county. The first was designed by Moncure Robinson, the Virginia civil engineer who was active in construction of a third of the railroads in the United States in the decade after the introduction of the locomotive.

Robinson's planes were also part of the Pottsville and Danville Railroad Company line. He and Francis W. Rawl, as engineers for the company, surveyed the 47-mile-long route between Pottsville and Sunbury in 1828.

Robinson located his planes at Wadesville and Darkwater so that the necessary power to operate them was to be supplied from neighboring streams as



AN EARLY TRAIN

Engine No. 107 pulling a single passenger coach past Cressona illustrates early railroad transportation in Schuylkill County.

a substitute for steam power. When in 1835 the rail-road was completed as far as the Mahanoy Valley, 4,188 tons of coal were shipped over the completed part of the line to Girardville. The following year 13,347 tons of coal were shipped, but the road, fostered by Stephen Girard, was abandoned.

The first plane at Wadesville was connected with the second one at Darkwater by a tunnel 750 feet in length, the second railroad tunnel built in the country. Its heavy masonry walls were still in excellent condition 50 years later when the Pennsylvania Railroad in constructing its line to New Boston cut diagonally through the abandoned tunnel.

The railroad descended into the Mahanoy Valley

from Frackville through the first of two Mahanoy Planes that were built.

The second was built when the Mahanoy and Broad Mountain Railroad constructed one 2,600 feet long from the Mahanoy Valley to the top of the Broad Mountain at Frackville. This plane hoisted cars to the top of the mountain with powerful machinery until it was abandoned February 24, 1932. The first coal cars were hoisted May 30, 1862. Larger engines were installed to operate the plane in 1886 and again in 1908. Both were made at the famous Pottsville Shops.

A similar plane at Gordon, 3,000 feet long with a pitch of 10 degrees, was abandoned in the early 1890's.

The second section of the Gordon plane descended 3,000 feet into the Heckscherville Valley. With connection of railroads in the Mahanoy Basin its functions were taken over by the Mahanoy Plane.

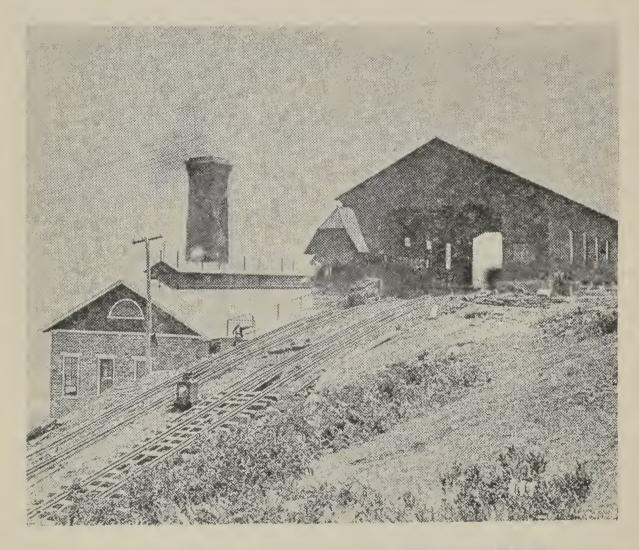
Robinson also was the engineer in the construction of the Little Schuylkill Navigation Railroad and Coal Company line from Port Clinton to Tamaqua. During the building of this road, he was associated with Frederick List, the German economist who, in exile in the United States, later became the "Father of German Railroads."

The Pennsylvania Railroad, with the Reading Company, Lehigh Valley, and Lehigh and New England Railroads, one of four still operating in the county, became a competitor of the Philadelphia and Reading with the opening of a line from Philadelphia up the Schuylkill Valley to Pottsville and New Boston Junction. At New Boston Junction connection was made with the Lehigh Valley Railroad—a connection that exists to this day. The rail link between Philadelphia and the Susquehanna River was completed

in 1887 when the Lehigh Valley connected with the North and West Branch Railroad at Tomhicken.

A late comer to the long list of railroads which once operated in the county was the Williams Valley Railroad, constructed in 1893 from Brookside and Tower City to Lykens. It was built through subscription in Tower City, Williamstown, Lykens, and Wiconisco and was controlled by the people of those communities until 1908 when it was acquired by the Philadelphia and Reading Railroad.

The railroads of the county hit the peak of their prosperity during World War I and the decade immediately following. The 100,000,000 tons of coal produced in 1917 and high production until the 1929



HEAD OF THE FAMOUS MAHANOY PLANE

This 2,600-feet long plane hoisted coal from Mahanoy Valley to the top of Broad Mountain at Frackville from 1862 to 1932. The illustration shows the top of the incline at Frackville.

depression kept freight traffic extremely high. Railroad passenger service, later seriously affected by the auomobile, also was at its peak following World War I.

The Pennsylvania Railroad, which does not now run a passenger train in the county, in the twenties ran 34 passenger trains daily. The Reading Company, now running 20 passenger trains a day, once ran 60.

The railroads have not been supplanted as the main carriers of coal in the county, but they are getting competition in freight hauling from the 4,200 trucks registered to Schuylkill County owners.

# Birth and Death of Trolleys

The People's Railway Company, which ran a steam engine through one of Pottsville's main streets in a service to Minersville, was the forerunner of the electric street railways which provided transportation between Schuylkill County communities for more than 30 years.

The People's Railway augmented its steam passenger service with horse-drawn trolley cars that brought passengers from other sections of the town to the train terminal.

The Schuylkill Electric Railway, the first to operate cars in the county by electricity, began in Pottsville in 1890, taking over the horse car line franchise which People's Railway had held since 1872.

The Pottsville company was the sixth electric railway company in the United States. Other lines were organized, but from 1892 the Eastern Pennsylvania Railways Company operated the trolleys in the lower end of the county until 1932 when the last trolleys were run and replacement of them was completed by bus lines.



#### OLD COVERED BRIDGE

This old covered bridge near Taylorsville is one of the few, picturesque bridges, reminiscent of the horse-and-buggy days, which remain in Schuylkill County.

The Schuylkill Traction Company, an outgrowth of the Mahanoy City, Shenandoah, Girard-ville, and Ashland Railroad, was incorporated in 1890, went into operation in 1892 and passed out of existence in 1932—also to be replaced by a bus line.

Trolleys operated to all the principal towns of the county at one time, the longest line being from Pottsville to Mauch Chunk in Carbon County.

# Advent of Automobiles

The automobile has been the most important factor in changing transportation methods in Schuyl-kill County in the 20th century. The 105 owners of them in the county in 1909 considered their cars

hobbies and did not depend upon them to any great extent for transportation.

The first one in the county was owned by Robert Allison, of Port Carbon, who bought a Winton gasoline one-cylinder motor model in 1898 from Alexander Winton, of Dayton, Ohio.

It was the first manufactured car purchased in the United States and cost Allison \$1,000 f. o. b. Dayton. It is now at the Smithsonian Institute in Washington and represents the first "trade-in" of the automobile business.

Allison traded it back to Winton when he purchased a later model several years later. Breakdowns encountered in a three-day trip to Philadelphia by Allison over the rough roads then existing, resulted in the car being shipped on the return journey and Allison coming home by train.

Schuylkill County, while on main air line routes, has no commercial air transportation. There is no airport in the county large enough to provide facilities for the big transport planes. Flying by individuals has increased considerably in the past decade, however, and airports are operated for private flying at Suedberg, Barnesville, Gordon, and Deer Lake.

#### CHAPTER IV

#### SCHUYLKILL COUNTY IN WAR

Schuylkill County was a battleground in the first of America's wars and has had more than her share of sons in every one since.

Scene of massacres by Indian allies of the French during the French and Indian War, the county sent companies of militia to reinforce Washington's army following the Battle of Concord.

Schuylkill Countians were called to fight the British invader again during the War of 1812. The Washington Blues of the Schuylkill Valley were organized and became part of the First Pennsylvania Regiment.

The Schuylkill Volunteers were attached to the Light Brigade at Camp Dumont in southern Pennsylvania and served from September, 1814, until March, 1815.

### War With Mexico

When the United States formally declared war on Mexico in 1846, the federal government asked Pennsylvania to raise two regiments of infantry. Governor Francis Shunk in November, 1846, issued a call for volunteers. The Washington Artillery of Pottsville, organized as the Independent Blues in 1840, responded.

Accepted as an infantry unit, the 94 members of the company were equipped as part of the First Regiment of Pennsylvania Volunteer Infantry.

In Pittsburgh the political shrewdness of the sol-

diers from the coal fields resulted in the amazing election of Francis W. Wynkoop, of the Pottsville Company, who left Schuylkill County as a private, to be Colonel of the First Regiment. Despite his rapid advancement as a Commander, Colonel Wynkoop was an excellent leader and in later Civil War years became a Brigadier General in the Union Army.

The First Regiment became a unit in the Army of General Winfield Scott after floating down the Ohio and Mississippi Rivers in boats to New Orleans.

It played a bloody and valorous part in Scott's famous siege of Vera Cruz. The Schuylkill Countians were in the forefront as the Mexican city was captured.

In the Battle of the Pass at Cerro Gordo, the Pennsylvania regiment engaged in a frontal attack on Mexican forces who occupied almost impregnable defense positions in the mountains. The assault resulted in staggering losses, but while it was being made, another part of the American force circled the pass to take the Mexicans from the rear.

In the midst of murderous fire from the Mexicans, Colonel Wynkoop gave his famous order, "Play up Yankee Doodle." The First Regiment was saved from being completely destroyed by the appearance of the Americans in the rear of the Mexicans.

The Schuylkill County company was presented with a stand of colors by General Scott at Mexico City after playing a heroic part in the battles of Pueblo Perote and San Angel.

Eleven of the 94 members of the company paid the supreme sacrifice for their country.

One of the members of the Washington Artillerists who served in Mexico, like Colonel Wynkoop, later attained high rank. He was Sergeant-Major

John Egbert Farnum, who joined the Union Army at the start of the Civil War, became a Major and then a Colonel. Seriously wounded at the Battle of Williamsburg, he returned to action and was brevetted a Brigadier-General for gallant conduct in the Battles of Fredericksburg, Chancellorsville, and Gettysburg.

The Mexican War made an impression on the new Schuylkill County communities being formed at that time. Palo Alto was named for a famous battle and New Ringgold for Major Samuel Ringgold, the first American officer killed in the war.

#### The Civil War

Schuylkill County's greatest claim to patriotism rests in its Civil War record. One out of every thirteen residents of the county served in the Union armies; 633 of the 13,034 in uniform gave their lives to preserve the Nation; Schuylkill County miners took part in one of the greatest exploits of the conflict—the mining of Confederate fortifications at Petersburg—and a Schuylkill County engineer gave the Army of the Republic the weapon it needed to keep its rail communications intact.

But the county had taken its stand against slavery long before the first shots were fired at Fort Sumter. It supported a link in the "Underground Railroad" that aided slaves in flights to freedom.

One of them was in the home of Samuel Gillingham at Seventh and Mahantongo streets in Pottsville. What was presumably a pantry in Gillingham's cellar was equipped with a bed, table, and a washstand. Women slaves slept in the attic.

Gillingham's aide was Timothy Boyle, who owned a grocery store on Mahantongo Street and a canal boat. In his business he sent a fleet of wagons to neighboring counties. Sometimes they picked up

bags of "black wool." "Yes sir, yes sir, three bags full" was the signal after three raps to let friends know slaves were arriving.

Gillingham's neighbors who saw the colored people he was harboring never told. There was a fine for harboring escaped slaves in those days.

Gillingham's house still stands in Pottsville, an unmarked monument to the county's part in the emancipation of the colored people.

## The War Begins

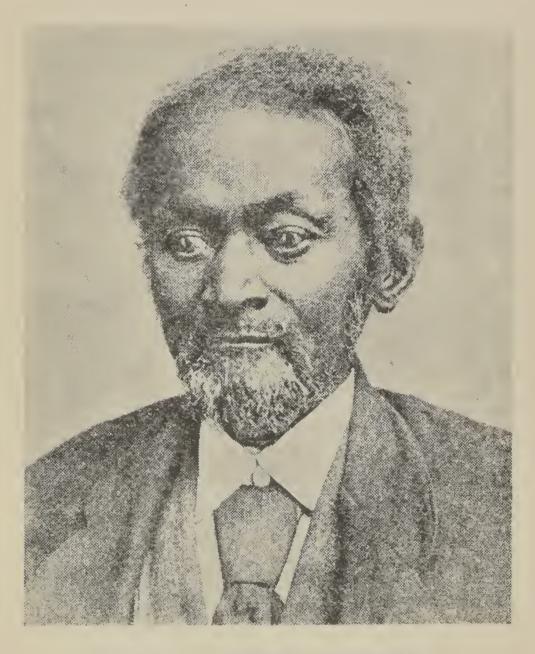
The county's representation in the Union armies was unequalled by any other county in the North. From a population of 91,000, Schuylkill enrolled 13,034 sons in the blue of the North. The first of them were the 230 county soldiers who left Pottsville on April 17, 1861, two days after President Abraham Lincoln called for 75,000 volunteers to maintain the Union following the attack on Fort Sumter in Charleston Harbor.

The county soldiers were members of the Washington Artillerists and National Light Infantry. They provided two of the five Pennsylvania companies first responding to President Lincoln's call to arms. Of the 532 Pennsylvanians in this group, almost half were members of the Schuylkill County units.

In the long and valorous military history of the county they are known as the "First Defenders." Although they arrived in Washington without military equipment, they were the first troops there and their presence in the capital prevented an attack on it by the Confederates.

When the "First Defenders" marched through the streets of Baltimore to change trains, they were stoned by Southern sympathizers. Nicholas Biddle, colored servant of Captain James Wren of the Washington Artillerists, suffered a head injury when struck by brickbats. His was the first Northern blood shed following the formal declaration of a state of war by President Lincoln.

Nicholas Biddle has been forgotten by succeeding generations. But marking the spot where he is buried in Pottsville, almost obscured by weeds and debris, is a stone erected by Pottsvillians who knew him in life. It says, "His was the proud distinction



NICHOLAS BIDDLE

The blood which gushed down the head of this colored servant when he was hit by a brickbat while marching with the First Defenders was the first shed in the Civil War.

of shedding the first blood in the late war for the Union."

The "First Defenders" were officially designated as such by an Act of Congress on July 22, 1861, after the defeat of the Union Army at Bull Run had exposed the deadly danger confronting the capital and threat to the personal safety of President Lincoln.

Within a week after the departure of the First Defenders, eighty volunteer companies, nineteen of which were from Schuylkill County and composed of 1,860 men, had arrived in Harrisburg.

The Ringgold Rifles of Minersville, the Minersville Artillery, Scott Artillery of Schuylkill Haven, and Port Clinton Artillery left April 20. The Ashland Rifle Company, Marion Rifles of Port Carbon, Columbia Infantry of Glen Carbon, Llewellyn Rifles, Wetherill Rifle Company of Saint Clair, Washington Infantry of Pine Grove and Lafayette Rifles of Saint Clair left April 21. The Tower Guards of Pottsville, Wynkoop Artillery of Silver Creek, Keystone Rifles of Port Carbon, Washington Yeagers of Pottsville, Scott Rifles of Tamaqua, Jackson Guards of Tamaqua and German Light Infantry of Tamaqua left April 22 and the Union Guards of Pottsville and the Schuylkill Guards of Minersville on April 24.

From April 17 to April 24, 1861, Schuylkill County had answered Governor Curtin's call for volunteers with 23 companies. What lay ahead for the Union was not foreseen as these first companies were enlisted for only three months service.

# The Battle of the Crater

Schuylkill Countians played the key part in one of the most daring military exploits of the Civil War when they planned and executed the explosion

of the Petersburg mine. What followed was the famous Battle of the Crater on July 30, 1864.

It represented an attempt by General Grant's Army of the Potomac to breach the Confederate defense lines at Petersburg, Virginia. The mine was the work of the Forty-Eighth Pennsylvania Regiment, most of whose members were Schuylkill County miners under the command of Colonel Henry Pleasants, a mining engineer. The 48th dug the longest military mine in the history of warfare up to that time. The tunnel ran for 511 feet to a point directly underneath a Confederate bastion. Cross-tunnels were packed with four tons of explosives.

Before the mine was dug, General Grant had wheeled his armies in a giant flanking movement designed to capture Richmond, the capital of the Confederacy. Confederate forts before Petersburg halted the attack.

Colonel Pleasants then approached General Burnside with a plan to use his Schuylkill County soldiers in mining the fortifications that had halted the Union assault. The planned explosion, he said, would create a huge breach in the line of forts through which the Union forces could pour, fan out, and take the entire position. The plan was given Burnside's approval.

Great secrecy shrouded the digging of the tunnel. Constant firing by the Ninth Army Corps distracted the attention of Confederates in positions being undermined.

Enormous difficulties were encountered by the miners. First water threatened to collapse the tunnel. The floor was planked and the sides and ceiling shored. Quicksand was encountered. The miners, undaunted, overcame this handicap by curving their tunnel upward to avoid it.

Mud and dirt was carried out by handbarrows, made of cracker boxes and half-barrels, placed in bags at the mouth of the tunnel and thrown upon the breastworks so no accumulation of earth would arouse the suspicion of the Confederates.

On the morning of July 30th, the mine was ready for the explosion. Then came a change in plans that had a fatal bearing on the outcome of the great exploit.

General Meade, in charge of that military area, and Major Duane, Chief Engineer of the Army of the Potomac, took over the project when the mine was completed. They dropped Burnside's plan of attack and replaced Burnside's offensively trained troops with soldiers who had experienced only defensive warfare.

As 55,000 Northern troops nervously awaited the explosion, the first attempt to set off the mine failed through a separated fuse. Into the tunnel crawled several miners to repair the fuse. The second attempt was successful.

The force of the explosion threw 15,000 assault troops into temporary panic.

The earth spouted into the air at three places. An oblong acre of ground was thrown 100 feet. Guns, gun carriages, and mangled flesh all came down in a common grave of men and machinery to a depth of 20 feet.

A gap 150 feet long and 30 feet deep was torn in the Confederate line. The Union troops passed through and beyond the great crater, but in the midst of victory an inexplicable order for retreat was given to the Union forces. Meade's fatal lack of planning turned a tremendous victory into a terrible defeat.

The Confederates rallied and poured a devastat-

ing cross-fire into the crater through which retreated the confused Northern regiments.

A Congressional committee investigating the conduct of the war later censored Meade and Duane for discouraging the mine project, for upsetting Burnside's plan of attack, and for the lack of command which caused the failure to advance when the way was open.

The crater is now the main attraction at the Petersburg National Miliary Park.

Two men who took part in the Petersburg exploit were awarded the Congressional Medal of Honor—the nation's highest military award. They were Robert Reid, of Pottsville, and P. H. Monaghan, of Girardville, later a Colonel.

Of the mothers of the county who had sons in the Union armies, Mrs. Agnes Allison, of Port Carbon, suffered the greatest loss. Her four sons were killed in action while fighting with the Northern troops.

### The First Armored Car

R. A. Wilder, of Cressona, one of the remarkable men who built the early railroads of Schuylkill County and the designer of the great Mahanoy Plane, during the Civil War conceived the plans for the first armored railroad car used in warfare.

Wilder, who was Superintendent of the Mine Hill and Schuylkill Haven Railroad, was consulted when destruction of the tracks and bridges of the Philadelphia and Wilmington Railroad in Maryland at the outbreak of the war cut off rail communication with Washington.

It was difficult to recruit workers to repair the damage while there was a possibility of being "picked

off" by Confederate sharpshooters. Wilder, aware that movement of troops to Washington was halted as long as rail communication was cut, drew up plans for an armored car in one day, gave them to the Baldwin Locomotive Works in Philadelphia, and the car was equipped for action four days later.

Iron plates on an open lumber car, with the plates loopholed for 40 or 50 riflemen, and a revolving howitzer that could be fired from front or sides of the car, protected restoration of the damaged rail lines to the capital.

Later when Union armies in Virginia were faced with sabotage to railroads, the armored car went there and successfully gave the same protection it had given in Maryland.

Wilder's weapon also served as a model for armored cars used in the Franco-Prussian war and for the English in the armored cars they used to fight an insurrection in Egypt and the Boers in the Boer War.

Wilder, during the Civil War, also submitted plans for a long range artillery piece, but ordnance experts said it was not practical; however, later his plans were the basis for development of long range artillery by the British.

## The Farquhar Incident

Escort vessels of the United States Navy frequently are given the name of an outstanding figure in American Naval history. During World War I and World War II, Schuylkill County was honored by having the name of one of her sons, Admiral Norman S. Farquhar, on the prow of fighting ships.

The Farquhar I was an escort vessel in the first World War. The U. S. S. Farquhar II entered World War II from the ways in 1943.

Both vessels were named for an officer who was a midshipman at 14 and the first naval officer of that rank to command a United States vessel on an ocean crossing.

The incident occurred when he was placed in command of a captured slave ship on its voyage from the African coast to the naval base at Norfolk, Virginia. During the Civil War, Farquhar was a naval officer on one of the Union gunboats in the historic encounter between the Monitor and the Merrimac, the first of the iron-clad warships.

In 1889, Farquhar was Captain of the U. S. S. Trenton stationed in the harbor of the Samoan Islands in the Pacific Ocean. These islands had been occupied by Great Britain, Germany, and the United States in 1880 with each of the three powers seeking a naval base and coal station in the fine harbor.

A tense international situation developed in 1889, when Prince Otto Von Bismarck, urged on by German imperialists who sought world-wide empire, ordered the German consul in Samoa to demand the immediate evacuation of the Americans and British.

The German flag was raised over Apia, most important of the island towns, and the German warships cleared decks to bombard the Samoan towns that refused to acknowledge German dominance. Sailors from the German fleet trampled the American flag in the dirt of the streets of Apia.

British and American warships at Samoa cleared their decks for action. The stage was set for an incident that could have thrown the three nations into war.

But before the first shot could be fired, a terrible hurricane struck on March 16, 1889. In its path in the harbor were three German, one British, and three American warships.

The German vessels and two of the American men-of-war were driven against the rocks and destroyed. Farquhar saved his vessel for the moment.

In the hour of peril the British ship, Calliope, quickly slipped its cables and beat out to open sea and safety. As the Calliope fought its way past the doomed Trenton, Farquhar ordered his men to hoist the American flag and give the fighting Britishers three rousing cheers.

Though his own vessel was wrecked, Farquhar directed the saving of his own crew of 550 men and part of the crew of another vessel.

This incident marked America's first participation in a world crisis and created a demand for a larger and more modern navy.

Farquhar's gallantry had much to do with the friendly relations between the American and British navies which began with the Samoan affair.

In 1903, Farquhar succeeded Admiral Sampson in command of the North Atlantic Fleet.

# The Spanish-American War

Schuylkill County furnished seven volunteer companies of infantry for the only war in the history of the United States in which the fighting was done entirely by volunteers—the War with Spain (1898).

All seven were Pennsylvania National Guard companies who went to Mount Gretna to volunteer for federal service April 28, 1898.

Two of the companies, F, of Pottsville, commanded by Captain George Dyson, and G, of Pine Grove, commanded by Captain James W. Umbenhauer, were members of the Fourth Pennsylvania Volunteer Regiment which was the first from the

state to be mustered into federal service on May 10, 1898.

The Fourth Regiment was engaged in advancing on the Spanish forces on Porto Rico when the short-lived war ended.

Five companies were members of the 8th Pennsylvania Regiment, which was still in training in this country when peace came. They were Company H, Pottsville, commanded by Captain John Owens; Company K, Saint Clair, commanded by Captain Edward G. Farne; Company B, Tamaqua, commanded by Captain William R. Conrad; Company E, Mahanoy City, commanded by Captain William D. Harris, and Company F, Girardville, commanded by Captain Harry H. Danks.

The 8th Regiment was commanded by Colonel Theodore F. Hoffman, of Pottsville. One of Col. Hoffman's battalion commanders was Major William H. Holmes, of Saint Clair.

The strength of the companies when they entered the U. S. forces was 60 men but later enlistments were increased to 120 men.

Slightly more than three months after being mustered into federal service the Fourth Regiment was on transports en route to Porto Rico.

The regiment disembarked at the port of Arroyo, Porto Rico, August 3, 1898 under covering fire of U. S. cruisers St. Louis, Cincinnati, and Gloucester.

It formed the reserve for an advance on the town of Guayama launched August 6 by the Fourth Ohio and Third Illinois Regiments. The battle that followed and the capture of Guayama were accomplished without the 4th Regiment being actively engaged.

Pottsville's Company F on August 13 was advancing to the front in the high ground beyond Guayama to counteract a flanking movement by the enemy against the Fourth Ohio regiment when American forces received word of the peace protocol.

On September 1 the regiment sailed for home and on October 2 participated in a Peace Jubilee in Philadelphia. Mustering out day was November 16, 1898.

The 8th Regiment was mustered into federal service May 12, 1898 and was sent to Virginia. A camp was established at Falls Church, Va., where the Schuylkill County soldiers were in training until

August 30.

From the end of August until November, the regiment was stationed at Camp Meade, near Middletown, Pa. The 8th Regiment was mustered out of federal service at Camp Mackenzie, Ga., March 7, 1899, eleven months after volunteering. Four of these months were spent at Camp Mackenzie.

# The Mexican Expedition

As a result of the banditry and pillage by the Mexican bandit Pancho Villa on the U. S.-Mexican border, American troops were dispatched there in 1916 for the Mexican government had admitted its inability to establish law and order in the area bordering on Texas.

Among the National Guard troops sent to the border were five companies of the Pennsylvania National Guard from Schuylkill County. They were Company F of the Fourth Regiment, the old Washington Artillerists of Civil War fame; Company H of the Eighth Regiment, Pottsville, the old National Light Infantry of the Civil War; Company B of the Eighth Regiment, Tamaqua; Company E of the Eighth Regiment, Mahanoy City, and Company C of

the Fourth Regiment, Pine Grove. These units served on the border for eight months.

### The First World War

Of the 13,000 Schuylkill Countians in the armed services during World War I, 342 were killed in action or died in the service.

The fighting men from the county were associated with many divisions, the Marines or the Navy, but Schuylkill County has its "own" units under fire in seven National Guard companies who fought with the 28th Division in France.

These were Company B of Tamaqua, Company E of Mahanoy City, and Company H of Pottsville, all part of the 112th Infantry Regiment; Company D of the 108th Machine Gun Battalion of Pine Grove, and Companies D and C and Supply Train of the 103rd Engineer Battalion of Pottsville.

These companies served with a division whose Commander said was composed not of soldiers but but "men of iron."

The Pine Grove Company was a unit of the machine gun battalion which waded the Vesle River under a tornado of shellfire to establish a bridgehead of the 28th Division in the Vesle-Aisne campaign. After the bridgehead was secured, Company C of the 103rd Engineers was badly mauled in erecting a pontoon bridge across the river. Company C and the other companies of the 103rd finished one bridge only to have it destroyed by shellfire. Immediately they began work on another.

During the operation the Germans, from commanding heights behind the river, poured a heavy fire of high explosives and gas shells into the area. All of the 103rd took part in the operation in positions where they were under direct observation of the enemy and exposed to his continuous fire. The 103rd Engineer train, which could have left the hot spot after hauling the pontoons to the river, instead stayed to see the bridge completed.

All the Schuylkill County companies served in the Champagne-Marne, Aisne-Marne, Oise-Aisne, Meuse-Argonne, Champagne and Lorraine campaigns in France.

They bore—with the rest of the 28th Division—the brunt of the last German offensive of the war that was broken on the Marne. During the attack the 103rd Engineers fought as riflemen in holding a section of the line.

Companies E, B, and H took part in desperate fighting near Chateau Thierry, and it was the 112th Regiment which later captured Fismes on the Vesle River to eliminate the last German foothold in the Soissons-Rheims pocket.

Company H suffered heavy casualties. Only 25 of the men who left the county with H Company returned in 1919. Two hundred men were wounded or listed as missing and before the end of the war H Company had received 600 replacements.

Other companies likewise had heavy casualties. More than half the company strength suffered wounds or were gassed. The 12 men from the Pine Grove Company killed in France were more than half of all the Pine Grove men who died in the service in World War I.

Although the Pottsville companies were listed as from the County Seat, their rosters included men from Silver Creek, Park Place, Girardville, Port Carbon, Ashland, Ringtown, St. Clair, Tamaqua, Schuylkill Haven, Donaldson, Shenandoah, Summit Station, New Philadelphia, Lost Creek, New Castle, Cressona, Pine Grove, Orwigsburg, McAdoo, Forestville, Jones-

town, Frackville, Adamsdale, Delano, and St. Nicholas.

Reminiscent of the great engineering feat of the 48th Regiment in the Petersburg mine, was the making of preparations for its part in the Argonne forest offensive by the 28th Division in 1918—a bit of deception in which the 103rd Engineers played a large part.

Artillery units of the division, unable to find a field of fire for their guns for the bombardment that was to launch the great Meuse-Argonne campaign, had to chop more than 1,000 of the big trees of the forest. The trees, if felled, would have told German reconnaisance flyers of the coming offensive; they were chopped but wired to remain standing. At a signal the wires were cut and 1,000 trees fell to earth with a tremendous cracking that was drowned out in the roar of the artillery barrage that followed.

The 103rd built the roads through the forest for hauling the guns into position and took part in the great "Operation Tree-Fall."

Michael Duda, of St. Clair, was the first Schuyl-kill County man killed in France after the American troops reached the front.

Another St. Clair man, now Rear Admiral Joel T. Boone, won the highest military honors of county servicemen. For a performance far above the call of duty in Belleau Wood, Admiral Boone, then a Surgeon in the Navy Medical Corps, was awarded the Distinguished Service Cross. He was cited for heroism again in the Argonne Forest campaign and awarded the Congressional Medal of Honor. After World War I, the Admiral served as personal physician to several presidents.

#### World War II

When World War II began with the bombing of Pearl Harbor, a Schuylkill County man, John Burns, of Pottsville, was among those killed in America's first battle.

Sons of Schuylkill were among the dogged defenders of the Bataan peninsula in the Philippines. Before the end of a world-wide struggle with Japan, Germany, and Italy four years later, 30,000 of the 200,000 population of Schuylkill County were in uniform.

County National Guardsmen, converted into Anti-Aircraft Artillery, were among the first American troops to begin an offensive against the Axis. They landed with General Eisenhower's invasion forces in Africa in 1942 and fought the then strong German Air Force from the ground.

A total of 680 county men were killed in action, dead or missing, at the end of the war. Of these 414 were killed in action, 56 died of wounds, three died of injuries, 159 died of non-battle causes, 47 were declared dead after being missing a year, and one is still listed as missing.

Schuylkill's casualty list was sixth in a state of 67 counties. Only those of Philadelphia, Allegheny, Cambria, Lackawanna, and Luzerne counties were higher.

The 30,000 Schuylkill Countians in uniform helped to swell Pennsylvanians in the armed forces to 8.23 per cent of the total. The state, however, has only 7.3 per cent of the country's population.

Two Schuylkill County fighting men—Corporal Anthony P. Damato, of the United States Marine Corps, and Captain Robert Roeder, of the Army's 88th Infantry Division—were awarded the Congressional Medal of Honor posthumously.

Damato, a Shenandoah man, was a member of an assault company of the Second Battalion, 22nd Marines, Fifth Amphibious Corps, when he made the sacrifice that earned his posthumous award on Engebi Island of the Eniwetok Atoll, Marshall Islands, February 20, 1944.

Corporal Damato and two companions in a foxhole were fighting off a Japanese night attack when a grenade was thrown into the foxhole. Without hesitation, Damato threw himself on the grenade. He

was killed, but his action saved his two buddies.

He had previously been cited for meritorious conduct in action in the landings at Arzeau, Algeria, November 8, 1942.

On November 21, 1945, the Navy honored his memory by launching the destroyer U. S. S. Damato.

Captain Roeder, of Summit Station, was the central figure in a heroic defense of Mount Battagilio (Battle Mountain) in Italy by a rifle company of the 88th Division.

He was killed in the battle in which every member of his company except one was killed or wounded.

He inspired his men to repel numerous counterattacks by paratroopers who were the best soldiers of the German army. Captain Roeder killed at least two of the enemy after suffering his mortal wound.

Mount Battagilio at that time was the most advanced position in the entire Allied line in Italy, and its capture was necessary to the subsequent advance of the Fifth Army through the northern Appenines and resulted in the great break-through into the Po Valley and the end of German resistance on the Italian peninsula.

Eventually an entire battalion of the 88th Division had to fight to hold it, but it was G Company, commanded by Captain Roeder, which got there first and fought out the counter-attacks until the com-

pany was decimated.

#### CHAPTER V

### INDUSTRY

Francis Yarnal, who established Schuylkill County's first industry when he built a grist mill at what is now Orwigsburg in 1750, would be amazed to see what has followed.

The grist mills were indispensable to the self-sufficient early settlers. Once they and sawmills were the center of every settlement in the county.

A few of both types of mills still operate in the county, but with less than ten per cent of the population engaged in farming, and lumbering reduced to producing mine timber, they are no longer a part of normal daily living.

The growth in population and Schuylkill County's own industrial revolution all came about through the mining of coal, despite the fact that iron-making was the first big industry and remained a major one until the end of the 19th century.

Mining and the manufacture of machinery for mining changed the economy of the county from that of an agricultural one to an industrial one.

The present limited scale of lumbering is due to the exhaustion of the once rich stands of timber. When the first settlers came to the county, the mountains were covered with giant pine trees and fine stands of hemlock. Cutting and sawing of these big trees built a thriving lumber industry.

The lumbering industry in turn helped to develop a road between Tamaqua and Hazleton as early as 1781, when lumber teams from the Susquehanna

Valley travelled that route to reach Hamburg and the lower reaches of the Schuylkill.

There were at least eight sawmills in Pine Grove, Wayne, and Washington Townships before the American Revolution. In the tax returns for Pine Grove Township (then Berks County) in 1779, nine sawmills, one tannery, and two grist mills were shown to be operating.

The earliest sawmill of which there is a record was that of Peter Conrad who operated one near the site of Landingville in 1756. Conrad also built a grist mill.

The first sawmill in Pine Grove Township was the one Baltzer Smith built on Swope's Creek in 1769. In 1772 Ellis Hughes was operating a saw mill at Seven



MODERN SCHUYLKILL COUNTY PLANT

The plant of the Bundy Tubing Company near Hometown is one of Schuylkill County's newest manufacturing industries.

Stars near Schuylkill Haven and in 1775, Martin Driebelbiss, the founder of Schuylkill Haven, had four saw mills, two grist mills, a distillery, and a blacksmith shop operating on the site of that community. By 1831 there were 100 sawmills in the county. Lumbering was an important industry from 1780 to 1850.

# Powder for Revolution

Powder mills, which had a long and colorful history in the county, including frequent explosions of them, were started with one on Swope's Creek, Pine Grove Township, during the American Revolution. It furnished supplies for the militiamen who were frequently called into the Continental Army.

Once numerous, powder mills in the county are now few in number. The only major explosives-plant still operating is that of the Atlas Powder Company at Reynolds.

# The Iron Age

Iron ore was mined in the county at the beginning of the 19th century but the veins were spread so thin that there was not one valuable bed. Despite the deficiency of native ore, the county, helped by ore imported from Cornwall and other ore producing centers, became a leader in the manufacture of iron.

Canal boats which hauled coal from Schuylkill County brought ore back to the iron furnaces on their return journey. Through most of the 19th century the county helped Pennsylvania furnish nearly half of the iron manufactured in the United States.

Every settlement had its forge. The larger ones had rolling mills for rolling iron into desired shapes and sizes.

The first iron was manufactured through the heating agent of charcoal. South Manheim Township,

now one of the least industrial parts of the county, once had one of the leading furnaces in this industry. Established at Jefferson in 1860, it was abandoned in 1885 when it could no longer compete with iron made with anthracite coal. In its boom years, the foundry had 900 farm hands employed in cutting wood for feeding the furnace.

The Valley Furnace near Silver Creek, built in 1804 by Rev. F. W. Geisenheimer and Co., was one of the pioneer furnaces for the manufacture of iron and the first (in 1833) to make iron with coal as a heating agent.

### The Pioneer Furnace

The Greenwood Furnace and Forge, established in 1807, was another of the pioneer iron producers. The extent to which the industry grew is shown by the fact that the Pioneer Furnace, on what is now the Phillips-Jones Corporation "Island" in Pottsville, in 1880 reduced 70,000 tons of ore to pig iron, using 50,000 tons of anthracite and 85,000 tons of limestone. The Pottsville Rolling Mills at Fishbach produced 35,000 tons of rolled iron in a year.

The Pioneer Furnace, later the Atkins Furnace, was the forerunner of the steel industry in the county. The Fishbach Rolling Mills, founded in 1853, were operated as part of the Atkins works. When it closed at the end of the 19th century, it was purchased by the Eastern Steel Company which operated a steel mill there until 1931. When the Eastern Steel mill closed, it had an annual capacity of 225,000 tons.

Before the introduction of dynamite and the firing cap in mining, the manufacture of "squibs" used in firing blasts was a big industry in St. Clair. The powder came from a mill in New Castle Township.

Tanneries were common in most communities adjacent to farming areas throughout the 19th century. One of the first built in 1790 was that of John Boyer at Rock Station, Washington Township.

The pioneer tannery was that of George Adam Reed, built in Pine Grove Township, in 1774. Tanneries were operated in Hegins Township, Hubley Township, Upper Mahantongo Township, Friedensburg, Long Run, West Penn Township, Eldred Township, and McKeansburg and did a thriving business.

With improvements in mining methods and the need for more machinery at the mines, the manufacture of this machinery became a major industry in the county. The parent of the industry was the Colliery Iron Works which Ben Haywood established in Pottsville in 1835. Haywood's shops eventually became the Philadelphia and Reading Coal and Iron Company shops, where everything from mine cars to pumps were made to supply the collieries. Cannon for the Union armies was made at the shops during the Civil War and propellers for ships during World War II.

Tremont, Donaldson, Shenandoah, Port Carbon, Mahanoy City, and Ashland had similar mining equipment manufacturing shops.

Of the industrial pioneers Abraham Pott, of Port Carbon, was one of the most inventive. His steam saw mill used the first steam engine in the county. Pott, who built the county's first railroad and first drop bottom car, instituted a series of experiments utilizing coal in the generation of steam and devised a grate that was later universally used.

One of the mechanical wonders of the late 19th century was the Gordon plane where 1,500 to 2,000 cars of coal were lifted daily from the Mahanoy coal

basin. Practically all of the parts of the plane were made at mining machinery shops of the county.

The Schuylkill Canal made boat building sizeable industries at Schuylkill Haven, Pottsville, and Auburn.

The dependence of Schuylkill Haven on the canal was indirectly the cause of the textile industry getting its start in the county. After the canal ceased operation, the town was without industry. Its leading citizens then turned to the establishment of clothing manufacturing and shoe making plants, and these industries have been the keystone of Schuylkill Haven's economy since that time.

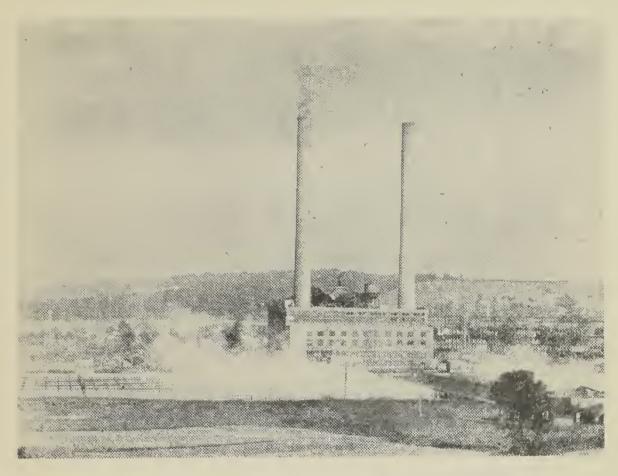
Railroads, whose prosperity is tied to the coal business, once employed men at car and repair shops in Schuylkill Haven, Palo Alto, and Gordon. Now virtually all this work is centered in one shop at St. Clair.

Before Chicago became the meat packing center of the country, slaughtering and packing houses were conducted in Pottsville, Shenandoah, and other county towns. Pottsville had a stock yard in the last half of the 19th century where animals were kept before being slaughtered.

The shoe manufacturing industry, which is still flourishing in Schuylkill Haven, Orwigsburg, and Auburn, was instituted in Orwigsburg as early as 1873.

Distilled spirits were produced by the earliest pioneers. A distillery was established at Pine Grove Township in 1790, one in Minersville in 1793, and the first industry in St. Clair was a cider mill. A brewery established in Pottsville in 1829 was among the first in the state.

Cigar manufacturing was an important industry until the second and third decades of the 20th



PINE GROVE STEAM ELECTRIC STATION

One of a network of power stations of the Pennsylvania Power and Light Company which uses anthracite as it generates electricity for Schuylkill County.

century. Tuscarora had half a dozen cigar factories in the early 1870's.

Bricks were manufactured at Llewellyn, Port Carbon, Auburn and other communities where the industry has since died out.

The sewing machine manufactured by Snyder and Son machine shop in West Penn Township in 1880 was among the earliest of this type machine.

Next to mining, which has been the county's principal industry for more than a century, textile and apparel manufacture is now the ranking industry. It has branches in every sizeable community in the county, and it produces everything from the shirts the giant Phillips-Jones plant in Pottsville makes to baby clothes and burial garments.

Wholesale and retail distribution of merchandise and foodstuffs ranks next in importance and public utilities—the railroads, power and transportation companies, water and gas companies—are third among non-mining industries.

In the southern part of the county manufacture of children's shoes is a big industry.

In the heavy industry field, the biggest plants are the plant of Aluminum Company of America at Cressona where aluminum extruded shapes used principally in construction are made; the Aetna Steel Products plant in Pottsville, manufacturers of steel doors and windows, and the Bundy Tubing Plant at Hometown, manufacturers of small size tubing.

### County Income \$220,475,000

Schuylkill County's population of 218,619 represents three per cent of the population of Pennsylvania. The estimated gross income of its 50,000 families is \$220,475,000.

The value of products made annually in the county is \$212,429,100, with products of mines and quarries ranking first in the county's production wealth. Textile products and food products rank second and third in value of production.

The county's 376 industrial plants employ 34,025.

### 35 Banks in County

The Miners Bank of Pottsville was the first in Schuylkill County. Chartered by the Legislature in 1828, it opened with capital of \$200,000. It was first a state bank and later became the Miners National Bank of Pottsville.

The First National Bank of Minersville, incorporated in 1863 with \$50,000 capital, was the county's first national bank.

The 35 banks now in the county have capital of \$5,038,530; surplus of \$5,995,785; deposits of \$105,-187,522, and resources of \$118,560,775.

#### CHAPTER VI

#### **EDUCATION**

The early settlers of our county were not here long before they became concerned with the schooling of their children.

The Germans, who were predominant among the original settlers, began to build schools as early as 1765. The children were usually taught in church buildings. Later log school houses were erected.

One of the first of the log school houses, built at Orwigsburg, was the Evangelical Lutheran School completed in 1786, where students were drilled in their catechism, taught to read and write in German, and to cipher.

In 1832 the Reformed congregation separated from the Lutherans and sold their interest in the school to those who remained in the historically famous Red Church of Orwigsburg.

Building of the "pay schools" from logs followed meetings of farmers who had children to educate. Land was donated and a committee appointed to fixe the pay rate and hire the teacher. The teachers' salaries varied between ten and twelve dollars a month.

The school term lasted two months with classes held six days a week.

Although the students were given a rudimentary education, the teaching was on the same plane as the roughly-built school buildings.

Teachers were not required to have much learning. They travelled from school to school and boarded with families of the district.

Tuition for students was 75 cents a month, plus a payment for fuel of \$1 a month. The only textbooks were a primer, arithmetic, testament, reader, and copy books.

Orwigsburg was not only the first county town to provide a common school education but also the first to found a school to give a good classical education for college preparation.

On March 18, 1813, Governor Simon Snyder of Pennsylvania authorized the Orwigsburg Academy at the request of Orwigsburg citizens.

A Board of Directors was appointed to manage the affairs of the school. The state provided \$2,000 for its upkeep. One half of this amount was to be used for the building and the remaining half for the salary of the teacher.

The Academy, too, was a "pay school" but the State provided that four poor children receive a two year education there. Ten years later the school was allowed to admit as many poor children as it could handle.

The educational levels of the Academy and the log school houses were sharply different. So thorough was the training at the Academy that Thomas R. Bauman, of Pottsville, was admitted to Yale University as a sophomore when he had completed his training there.

In 1827 a log church school house was built in Pine Grove.

Wherever the Germans lived, they built schools for instruction in religion and the German language. This later was the chief cause of their protests to the establishment of public schools.

The Germans wanted their children to learn their mother tongue—not English.

Pottsville's first "pay school" was instituted early in the nineteenth century when a seminary for the education of boys was completed. The seminary continued until about 1840.

The Pottsville Institute to "prepare for college and life" was started in 1832. It was sometimes called the Norwegian Street Academy. It was located at the present site of the Garfield School building in Pottsville.

In 1814 the first county school devoted to the education of girls was started in Pottsville at Market and Centre Streets by Miss B. Anne Clement and a Miss Allen.

In April, 1843, Miss Marcia M. Allen opened another school at Third and Market Streets for boys and girls. Later she was joined by Mrs. Frank Hill who continued the school when Miss Allen left to teach in the Lewisburg Seminary.

The Hill School was moved to Thirteenth and Mahantongo Streets. It was continued later by Mrs. Stephen A. Thurlow on Howard Avenue until 1925 when Mrs. Thurlow retired.

In 1843 St. Ann's Catholic School for girls was opened on Centre Street in Pottsville. The teachers were the Sisters of Charity.

The Pottsville Academy for Boys was founded in 1846 on the present site of St. John's Parish Hall.

An outstanding school, the Academy was forced to close when the principal left to become Superintendent of the Pottsville public schools and most of the students followed him.

Although the people of Schuylkill County had long been "educationally minded" and had built and maintained schools almost from the date of the first

settlements, the start of the free public schools met with violent opposition, not only here but throughout the state.

In Pennsylvania, the settlers were largely Quakers, Swedes, and Germans. These three groups were interested first in religion and second in seeing that their children learned the language of the parents, whether it be English, Swedish, or Dutch.

When the settlers thought of schools, they had in mind education in religion and language. The school and the church were usually together. Very often the church served as the school and the minister as the teacher.

# Third of People Spoke German

As late as 1833, when Governor Wolf sent a message to the legislature, a thousand copies were printed in English and five hundred in German for those who could read only that language.

The Germans, whose descendants are still called 'Pennsylvania Dutch,' feared that the public school would neglect religious teachings. And they feared most of all loss of the children's ability to speak in the tongue their parents had brought from Europe. Further resentment was built by the possibility that the children would be taught by teachers who could speak only English.

The independent Dutch, who had always contended they could take care of their own problems, including education, resented paying taxes for the education of "other peoples" children. "Free schools would furnish hot beds wherein idle drones, too lazy for honest labor, would be reared and maintained," they said.

The first attempt to start the "Free Schools" was made in 1809. The Pauper Act of that year provided that all children between the ages of five and

twelve whose parents could not afford to send them to the "pay schools" be furnished an education by the state.

This "free" schooling was a failure. Parents refused to admit they were paupers and would not enroll their children. They could not afford "pay schools" and pride would not let them accept the alternative.

In 1834, the Free School Act, creating the public school system, was passed. It may seem strange, in light of the present standing of Pennsylvania's public school system, but the proposal for a school system, open to everyone and supported by taxes on all, was met by violent opposition.

Districts were given the right to accept or reject the system. Only four in Schuylkill County accepted "free schools" in the first balloting. Approval was given by the voters of Pottsville, Orwigsburg, Norwegian Township and Schuylkill Township.

Nine districts rejected the free schools, and three districts failed to vote.

# "An Unnecessary Evil"

Farmers came to the voting place armed with pitchforks, scythes, and guns. They threatened those who voted in favor of the free schools. "An unnecessary evil" they termed what has since been recognized as one of the most enlightened things the Commonwealth ever did.

The farmers were trying to protect their heritage of language and religion in the only manner they could.

Voting was conducted with ballots consisting simply of a sheet of paper with the words "For Common Schools" and "Against Common Schools" writ-

ten on it. The paper was laid upon a table. Each voter put a stroke after the words "For" or "Against" to signify his intention.

The very farmers who at first used threats of violence to defeat the public school system were in later years tricked into voting for the system themselves.

Because of their stubborn adherence to the German language many could not read English. Boosters for the "free schools" made them believe that in marking their ballots they were voting "against" when actually they were voting "for" the Common School.

Despite an inception of the system there was bitterness for years afterward. Opponents believed they were paying taxes to support something in which they did not believe. The "free schools" eventually proved themselves by giving children a better education through improved schools and constant improvement in the quality and training of teachers; however, those who at first refused to bow to the general will of the people were finally forced to accept the public school system through orders of the court.

Through the years the opposition decreased. In 1893 when a law was passed to provide free books for all students and the public school system became completely free, practically all the opposition had disappeared.

Although the description "Free Schools" was a misnomer in describing the public school system, establishment of the schools did furnish equal educational opportunities for the very rich and the very poor. The equal educational opportunities were made possible by the realization that the education of children is the responsibility of society as a whole; hence, every adult is taxed for the support of the public schools.

In the century following the establishment of the public school system in Schuylkill County, the system has grown into 68 districts, 60 of which are supervised by a County Superintendent of Schools, elected by the vote of the districts. Eight of the larger ones have their own superintendents.

South Manheim Township is the district that has no schools. Its students are transported to Auburn or Schuylkill Haven for their schooling.

The district receives tax money for the education of the children, however, and administers the payment of tuition to other districts and the transportation of the children to and from school.

The 28,702 students now attending classes in the county are taught by 1,414 teachers.

# Newspapers of Schuylkill County

Newspapers have worked hand-in-hand with the schools since the founding of the county in educating people in what was occurring in their home communities as well as in the world around them.

The six daily and nine weekly newspapers now being published are the survivors of scores of newspaper enterprises launched since Benjamin Taylor first issued his "Journal"—printed on coarse brown paper—in Pottsville on March 17, 1825.

The hardiest is the "Pottsville Journal" which is still being published and the first newspaper to be printed in Schuylkill County. For many years it was the county's only newspaper printed in the English language.

Influential newspapers of the early development of the county were German language publications since most of the first settlers came into Schuylkill County from Berks County, then predominantly settled by Germans.

Of them "The Stimme Des Volks" (Voice of the People) founded in 1828 and published in the then county-seat of Orwigsburg as the official organ of the Democratic party, was the first. Shortly afterwards the "Demokratische Freiheits Press" (Democratic Liberty Press), a Whig party paper, was published in Orwigsburg. It moved to Pottsville in 1834.

Pottsville, the founding city of journalism, was to have many other newspapers in later years.

The "Journal" waxed strong in the years following its purchase for \$800 by Benjamin Bannan after being seized by the Sheriff for debts. Bannan made the paper indispensable to those engaged in coal mining or commerce on the Schuylkill Canal by compiling statistics of the coal industry and the canal for publication in his paper. The "Journal" became a daily newspaper in 1869. Bannan launched a second journalistic enterprise in 1832 when he published the Schuylkill County "Bauer" (Farmer) in German.

In 1846 the "Pottsville Adler" was launched. It subsequently became the "Leuchtthrum" (Lighthouse), then the "Schuylkill Democrat." Both it and the "Stimme Des Volks" were published in Pottsville in 1855.

Subsequent county seat publications were the "Jefferson Demokrat" in 1855, "Pottsville Standard" in 1869, "Amerikanische Republikaner" in 1855, "Pottsville Volksblatt" in 1871, "Pottsville Advocate" in 1830, "The Pottsville Emporium and Democratic Press" in 1838, the "Mining Register and Schuylkill County Democrat" in 1850, "Pottsville Gazette" in 1854, "Democratic Standard" in 1857, "Evening Transcript" in 1873, "Daily Standard" in 1873, "Evening Chronicle" in 1875, "Pottsville Eve-

ning Advertiser" in 1872, the "Workingman" published by pioneer labor leader John Siney in the interests of the Miners and Laborers Benevolent Association, the "Emerald Vindicator" in 1874, the "Saturday Night Review" in 1889, and the "Pottsville Daily Republican" in 1884.

Of all these newspapers only the "Journal" and "Republican" survive today. For many years there were three daily newspapers in the county seat, but the "Evening Chronicle" after almost a half century, ceased publication in 1923.

Of the others most lasted only a few years. The career of the "Daily Standard" begun in 1873, while short-lived, constituted one of the most brilliant chapters in Schuylkill County newspaper history.

The "Standard" published an eight-page paper—something only metropolitan cities did in those days—hired a brilliant staff of writers and 14 printers. While not successful from a business standpoint because a temperance column affronted some business interests, it nevertheless was a brilliant success as a literary venture.

The Mahanoy City "Record-American," one of six daily newspapers now published in the county, had its beginning in the establishment of the "Mahanoy Tribune" in 1878. The "Tribune" was preceded by the "Gazette" published in 1865. The "Mahanoy City Local," "Mahanoy Valley Record," "Daily American," and the "Black Diamond" were other papers published in Mahanoy City. The "American," "Tribune," and "Record" were all combined to form one paper from 1917 to 1919.

"The Saule," of Mahanoy City, established in 1888 and still being published, is one of the oldest newspapers printed in the Lithuanian language in the United States. The "Valley Echo" was established in Tower City in 1883 and published until 1910 when it was consolidated with the "West Schuylkill Herald." The "Herald" is still being published.

The "Shenandoah Herald" established in 1870 still survives as one of the county's daily newspapers. Other papers published in Shenandoah were the "Weekly Advocate" established in 1894, "The News Budget," the "Anthracite Labor News" established in 1903, the "Daily Times" published in 1904, and "The Miners Weekly."

Thomas Foster, the editor of the "Shenandoah Herald," later started the famous International Correspondence Schools at Scranton.

Baby of the existing newspapers is "The Valley Citizen," a weekly paper published in Valley View since 1929.

"The Schuylkill Haven Call" was founded in 1890 and has outlasted the "Monitor" established in 1874, "Map," established about 1850, and the "Herald" established in 1880.

"The West Schuylkill Press and Pine Grove Herald" is the result of a consolidation of the "Press" established in 1877 and the "Herald" established in 1878. But the "Tremont News," published from 1865 to 1903, was the first newspaper in Tremont.

The "Tamaqua Courier" was founded in 1868 under the name "Saturday Courier." Prior to its founding, however, Tamaqua newspaper readers were served by the "Tamaqua Legion" (1849), "Tamaqua Gazette" (1855), and the "Anthracite Journal" (1861). In the latter part of the 19th century Tamaqua had two daily papers, the "Courier" and the "Item."

Minersville's first newspaper was the "Schuylkill Republican" which was established in 1872 and

moved to Pottsville in 1884 to become an adjunct of the "Pottsville Republican."

The present "Ashland Daily News" is a successor of the "Mining Gazetter," founded in 1857, the "Constitutional Advocate" launched in 1864 and the "Ashland Record," inaugurated in 1880.

The Girardville "Gazette" founded in 1878 and the "Herald" founded in 1873 were that community's two contributions to the publishing enterprises.

The Orwigsburg "Times," published in 1858, was the first Orwigsburg paper printed in English.

Most recent of the casualties was the Pottsville "Morning Paper," from 1922 to 1936 the only daily morning newspaper published in the county.

Daily papers now being published in the county are the Ashland "Daily News," Mahanoy City "Record American," Shenandoah "Herald," Tamaqua "Courier," Pottsville "Journal," and Pottsville "Republican."

Weekly papers published are the "Schuylkill Legal Record," the official court paper; the Coaldale "Observer," Valley View "Valley Citizen," Schuylkill Haven "Call," Tower City "West Schuylkill Herald," Orwigsburg "News," Frackville "Ledger," Mahanoy City "Saule," and the Tremont "West Schuylkill Press and Pine Grove Herald."

### Library History

Orwigsburg, Friedensburg, and doubtless other county towns had reading rooms in their very early days. Even as early as 1826, Pottsville young men started a Library and planned a building for it. It was not until 1911, however, that a free public library was started in Pottsville. Shenandoah's public library, which began as a school library, was also thrown open to the public.

It was not until the great depression of the 1930's that Federal aid furnished the money to start small libraries in Ashland, Frackville, Mahanoy City, Minersville, Orwigsburg, Port Carbon, Schuylkill Haven, Tamaqua and other smaller places. These libraries have continued to grow and now are entirely supported by their own citizens.

#### CHAPTER VII

### EARLY CHURCHES OF THE COUNTY

Most Schuylkill Countians know the "Red Church" as a landmark on the highway to Reading between Orwigsburg and Deer Lake. But few know that the "Red Church" was the first built in the county (1754-1755) and that the original structure was burned by the Indians during one of their marauding forays through Schuylkill County.

Its construction can be traced to the deep religious feeling that was part of the heritage of the first settlers of the county.

When these pioneers broke through the gap of the Blue Mountains and pressed beyond the northern slopes of the mountain, they began construction of a log church as soon as their homes had been completed.

Their first pastor was Reverend Daniel Schumacher, an independent minister of the Lutheran Church.

The Indians burned this church in 1756. Most of the members of the congregation had withdrawn within protection of the Blue Mountain forts or crossed the mountain into Berks County to escape massacre.

But when peace returned to the wilderness the settlers returned and rebuilt their church. It was dedicated in 1770 as the "Evangelical Lutheran Church Zion in Brunswick Township.

Several other churches were built by the settlers in the next decade following the end of the Indian raids.

St. Jacob's Church in Pine Grove Township, organized in 1780 by Reverend Wilhelm Kurtz as a Lutheran Church, still serves Lutherans of that part of the county.

Rev. Kurtz in the same year organized Salem (Hetzel's) Church in Pine Grove Township. It was called "Hetzel's" because a young school teacher, Peter Hetzel, led a group of Lutheran farmers from the eastern part of Pine Grove Township in securing a tract of land from the government for the erection of a combined place of worship and school.

Hetzel was the schoolmaster and read the sermons to the people each Sunday. The church was named "Salem Church" in 1797. Its first congrega-



OLD RED CHURCH

This familiar landmark on route 122 south of Orwigsburg stands today where the county's first church was built in 1754-55 and was burned down by marauding Indians. When peace came, the settlers returned in 1770 and rebuilt the church, one of the best known in the county.

tion was Lutheran. Later it was Reformed, and then again Lutheran.

Guncklel's Reformed Church, organized in Pine Grove Township in 1782, was demolished in 1816 and St. Peter's Lutheran and Reformed Church constructed on its site.

St. Paul's (Summer Hill) Church in South Manheim Township dedicated in 1787 provided a house of worship for those of both the Lutheran and Reformed denominations.

Zion's Church in West Penn Township was erected in 1790, was replaced by the present stone church in 1846, and, too, housed Lutheran and Reformed services.

Christ Reformed Church in Brunswick Township, dedicated in 1794, was built near the "Red Church" in the angle made by the Shamokin and Landingville roads.

St. John's Church at Friedensburg was dedicated in 1797 to provide a place of worship for settlers of Norwegian Creek, Pine Swamp (Pottsville), Flowery Field (Peach Mountain), Llewellyn and other places above Sharp and Second Mountains. It was for followers of the Reformed and Lutheran faiths.

Friedens Church on the Little Schuylkill River in Brunswick Township was organized between 1798 and 1800 by Reverend Daniel Schaeffer.

"Pineswamp" Church, built in 1813, was the first church in the vicinity of Pottsville. It was built several hundred yards outside of what is now the city line. St. Luke's Episcopal Church (1830) was the first church actually built in the city itself.

An Episcopal Congregation had been organized in an old log school house on North Centre Street in 1827 and John Pott presented a lot to the congrega-

tion. Consecrated in 1830, the Episcopal Church assumed the title "Trinity Church" in 1836.

Jesuit missionaries from Bally were the pioneer Catholic clergy in Schuylkill County. Prior to 1827 a priest came regularly from Milton in Northumberland County every Sunday to celebrate Mass. In 1827 St. Patrick's Church, Pottsville, was built and Tamaqua was appointed one of its missions.

John Pott, who had given a lot for a church to the Episcopalians, did the same for the Catholics. A small building at the present site of St. Patrick's was erected. Rev. John Fitzpatrick was the first pastor.

Friedens (Clauser's) Lutheran and Reformed Church in Branch Township was built in 1819 of logs. It was replaced by a brick building in 1856.

A Union Church was erected in McKeansburg in 1828.

The Lutheran and Reformed Jerusalem Church was erected in Schuylkill Haven in 1826. A cemetery had been established in 1794 with the burial of the founder of the town, Martin Dreibelbiss.

### CHAPTER VIII

#### **FARMING**

Schuylkill County's first farmers were "Pennsylvania Dutch" who settled on the northern slopes of the Blue Mountain between 1750 and 1760 and raised rye, potatoes, and corn for their own tables. Their descendants predominate among the county farmers of today.

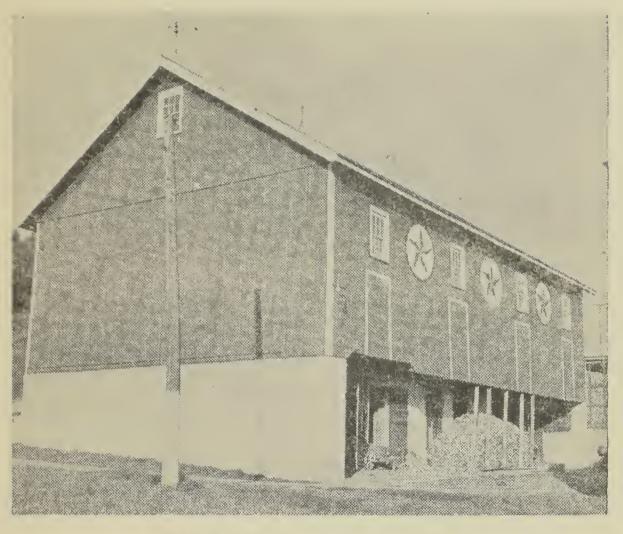
County farming now is on a commercial basis. Crops are raised for the cash returns they bring. In the early days of the county, all the settlers were in a sense farmers. They raised all the food they needed in their own fields and augmented the killing of livestock by killing game for meat.

Even as late as 1825—when the coal boom began—salt was practically the only grocery sold. The settlers even produced their own maple sugar.

With the development of coal mining and the increase in population, demand for the products of the farm by those who lived in the towns increased. Though the early coal fields were in the southern and western portions of the county, it was these sections which first developed farming on a commercial basis.

Later as the Mahanoy coal basin was tapped and settlement of the county beyond the Broad Mountain increased, the farming centers of the Ringtown Valley and Lakeside were developed.

A local market existed for produce of the farms until the depression decade of 1930-40 when county farmers turned altogether to metropolitan markets as an outlet for the food they raised. In addition farming had become a big business in some sections, and



WELL-KEPT COUNTY BARN

This well-kept barn on a farm in West Brunswick Township is typical of many in the county and serves as a reminder Schuylkill County is also an important agricutural area.

the old style system of distribution by door-to-door sales could not handle the products of the big poultry farms in the Hegins Valley, the giant cabbage crops of the Ringtown Valley, or the potatoes that were produced by the hundreds of bushels to the acre.

The gasoline age in farming—the tractors, cultivators, potato pickers and combines that have helped increase production so much—came in the 20th century. But scientific farming had its pioneers more than a century ago when Schuylkill County had yet to advance from an agrarian to an industrial economy.

Joseph Morgan, of Orwigsburg, in 1838 even made the daring experiment of trying to raise silk. He imported a few silk worms and began growing

mulberry trees. History does not record whether or not his experiment was successful.

Tomato growing was introduced into the county in 1849 by John Paxon, who had a farm on Schuyl-kill Mountain, south of Schuylkill Haven. Paxon and some English neighbors popularized the tomato, for until then the first settlers of German stock would have nothing to do with this vegetable imported from England.

Strawberry growing, which since has had commercial success in the Hegins and Mahantongo valleys, was introduced by Joshua Keller.

Samuel Diehl, who established a farm in Mahantongo Township in 1860, was the first of the scientific farmers. He introduced a new seed potato in 1870 that increased potato yields from 80 bushels to 300 bushels an acre. Diehl is also credited with first raising apples on a commercial basis in 1878.

The progress of scientific farming is shown by the fact that John Schrope, a Hegins Township farmer, in 1920 set a state record by raising 510 bushels of potatoes to an acre, but in recent years, yields of better than 600 bushels an acre have been good enough only for county records.

Poultry farming on a commercial basis was instituted by W. H. Maurer on his farm in the Deep Creek Valley in 1894. Even at that early date Maurer was selling his eggs and chickens on the Philadelphia and New York markets.

Jacob Fox, who settled at the site of Branchdale in 1790, was probably the originator of the modern dry cereal breakfast. Too far from a grist mill to have their wheat ground into flour, he and his family boiled it and ate it with milk.

Not far from the Fox home, Jacob Hime, probably the first farmer in that section of the county, was

engaged in farming and lumbering at the site of Llewellyn as early as 1750.

Everything has increased on farms since the 19th century except population. Mechanization of farms and resulting greater productivity with less manpower has been a factor in the decline of farm population, but a change in the economy of the United States from an agricultural to a highly industrialized one has been the main factor.

The population figures show that despite an increase in the county's population from 11,339 in 1820 to 220,000 today the population of primarily agricultural townships has declined—in some cases as much as 20 per cent—since 1880.

In 1884 county farmers raised 413,100 bushels of potatoes, compared to the 731,097 bushels raised now. The corn crop is four times that of 1884.

The cattle population is three times that of 1884 and the number of hens and pullets forty times what it was in 1884. The changing economy is revealed by a decline in sheep and lambs from 6,000 in 1884 to approximately 500 now. Once farm wives spun cloth from the wool of the sheep and farm households produced all their own clothing. Wool, no longer produced in quantity, is still shorn from flocks on 18 farms.

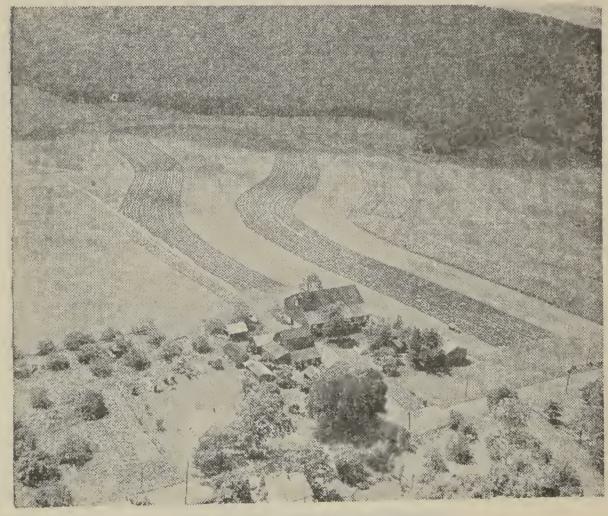
Trucks and highways of Pennsylvania are a necessary part of farming now. With 26 per cent of the population of the country within overnight trucking distance of the county, vegetables, eggs, and fruit can be delivered to any of the big Atlantic seaboard cities the morning after being readied for shipment on the farm.

Tomato growers in recent years have joined the potato, poultry, and cabbage growers in seeking markets that will accept their products in bulk year after

year. The big tomato canneries of Pennsylvania and New Jersey are in effect buying from county growers even before the tomato plants have been set in the ground. Much of the risk the farmer formerly took in disposing of his crop has been removed.

The "County Agent" methods of extension work among farmers—introduced in Schuylkill County before World War I—has helped to popularize the value of scientific farming. Through demonstration and education financed by the county and the Commonwealth through Pennsylvania State College, farmers get all the benefits of the vast research carried on in farming at the State University.

This is the agency through which the farmer learns what is best to spray on his fruit trees to prevent disease and kill insects, how to cope with crop



CONTOUR STRIP FARMING

New farming methods are illustrated by this aerial photograph showing contour strip farming in the Lewistown Valley.

blights, and how to preserve and increase the value of his land.

Many of the county's farmers in recent years have adopted the State College teaching of contour plowing to prevent erosion.

Through their own associations dairymen have abolished tuberculosis in cows and have increased the yields of their milk herds by selective breeding.

The scientific farming practiced has helped to increase the value of the 2,184 farms in the county to \$10,738,303. Implements and machinery on these farms is valued at \$3,264,206.

The farms, which average 76.1 acres, produce principally corn, oats, wheat, hay, potatoes, apples, peaches, poultry, eggs, milk, and dairy products.

But poultry is the biggest farming income producer. The value of all poultry and poultry products sold in 1945 was \$1,922,694. Value of all farm products sold or used by farm households that year was \$6,377,177.

Schuylkill County farms produced \$1,152,138 in dairy products and \$1,389,084 in potatoes the same year.

#### CHAPTER IX

### THE COUNTY SEAT

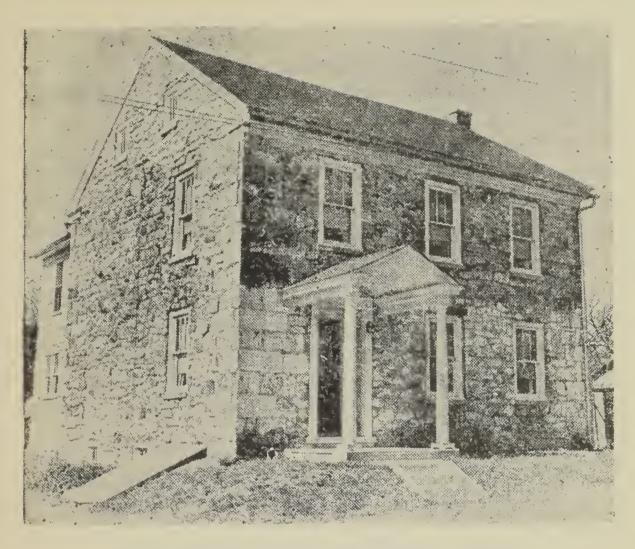
The inn of Abraham Reiffsnyder at McKeansburg was the first seat of justice in Schuylkill County, following the county's creation by act of legislature in 1811. There Judge Robert Porter of the Third Judicial District (Wayne, Schuylkill, Berks, and Northampton counties) presided for the first time in December, 1811. Two Orwigsburg men, George Rausch and Daniel Yost, were his associate justices.

In 1815, a court house was built in Orwigsburg where the first court was held in 1816. Another building was added to the rear of the structure in 1827 for the public offices. The two buildings were joined subsequently by an extension in 1846.

Probably a reflection on the needs of justice at that time was the erection of the Orwigsburg jail in 1814—a year before the court house. Formerly a private home, it was converted by designating the cellar as a cell. Prisoners were handcuffed and chained to tree stumps placed in the cellar.

The ingenuity of Orwigsburg residents resulted in their town being chosen as the first county seat. There was a lively contest between McKeansburg, as the oldest town in the county, and Orwigsburg for the honor.

When Governor Snyder appointed commissioners to weigh the advantages before making a choice, Orwigsburg residents arranged with the owners of sawmills along Mohannon Creek to dam up their water supply shortly before the scheduled inspection by the commissioners.



#### THE FIRST COURT WAS HELD HERE

The inn of Abraham Reiffsnyder at McKeansburg, where court was first held, remains to this day. Now a modern, private home, it still has the tavern's original stone walls.

When the commissioners arrived, a signal was given on a horn, the floodgates were lifted and a strong stream of water gushed along the Mohannon's banks. Impressed with the possibilities of Orwigsburg as a manufacturing town, the commissioners recommended it for the county seat.

# County Seat Moved

As early as 1831 there had been demand for removal of the county seat from Orwigsburg to Pottsville. Rapid development of coal mining as the dominant industry of the county placed the agricultural interests of southern Schuylkill County in a secondary role.

After being petitioned for a change several times, the Pennsylvania legislature in 1847 passed an act removing the county seat from Orwigsburg to Pottsville.

The act required that Pottsville erect a court house, a new public jail and public offices and also provided that the question of removal be submitted to the voters.

A campaign as spirited as any in the political history of the county followed but when the votes were counted 3,551 were for removal and 3,092 against.

The county seat was moved to Pottsville on December 1, 1851.



THE NEW AND OLD COURT HOUSES

This 1891 photograph shows the county's new and present court house, without the Orphans' Court annex but with the old court house to the right.

### Indians Settled Near Pottsville

Indians are known to have settled in the vicinity of Pottsville and nearby Indian Run, but whether there was actually an Indian settlement on the site now Pottsville is a matter of conjecture.

After the Neiman massacre in Pottsville, there was no further white settlement of any account until 1800. But Indian Run was the site of Indian settlements and as late as 1830, bands of Indians visited that area frequently to enact their tribal rites.

In 1800, John Reed was sent to Pottsville to make a dam for a furnace and forge built by Isaac Thomas, Lewis Morris, and Lewis Reese. Reed's son, Jeremiah, born in a log cabin at the site of the Pottsville Hospital, regarded himself as the first white child born in the county seat.

John Pott, who settled in the area in 1804, laid out the town in 1816. The county seat then was known as "John Potts at the coal mine." Purchasers of property in Pottsville even today are able to trace deeds back to the time when the whole community was owned by Pott.

A year after his death, the State recognized his village as the borough of Pottsville.

Though Mt. Carbon at that time was to have been incorporated as part of Pottsville, it insisted on keeping its name and later became a separate borough.

A monument to John Pott stands in the play yard of Pottsville's Centre Street school where once stood the only cemetery in the city. Pott's body and those of others buried there were removed from the yard in 1897 to provide a recreational site for school children.

Pottsville grew by leaps and bounds. In 1907 the village of Yorkville became a part of the borough.

In 1910, after defeating the same proposal in 1899, voters of the county seat approved a proposal to become a third class city.

### The Court House and Prison

The court house which Pottsville was required to build as a condition of becoming the county seat in 1851 cost \$30,000. Erected on the site of the present court house it was replaced in 1892 by the present building. In 1933 an annex was added to the building.

The county prison, to the rear of the court house, was built with the original house in 1851.

### The Neiman Massacre

The Indian attack in which the Neiman family was massacred came at a time when masts for ships of the Continental and French navies were being cut between Pottsville and Mt. Carbon during the Revolutionary War about 1780.

Neiman and his three children were murdered by a band of five Indians who descended on the home, now the site of the Pottsville Hospital. Terrified, the other settlers began to flee.

As a result of the massacre, reinforcements were sent to the captain of Marines of the Continental Navy who was in charge of the work of securing ship masts.

### Henry Clay's Monument

The Henry Clay monument is the most famous in the county.

Standing on a hill west of Centre Street, it is visible to everyone entering or leaving the county seat.



HENRY CLAY'S MONUMENT

The county's largest monument overlooking Pottsville is her tribute to a great statesman's fight for a high protective tariff which benefitted the anthracite industry before the Civil War.

Among visitors it is always an object of curiosity. Why a community in Pennsylvania hundreds of miles from Clay's home state of Kentucky should have honored "The Great Pacificator" is a source of puzzlement to them.

But Pottsville had good reasons to honor Clay.

Because he fought for the protective tariff at a time when English iron and coal were competing with the products of Schuylkill County, the residents of Pottsville had the tremendous statue cast in iron and erected it on a plot of ground donated as a city park by John Bannan. The monument is 66 feet high and weighs 45 tons.

On a stone at its base is this inscription:

"In honor of Henry Clay this monument was erected by the citizens of Schuylkill County and bequeathed to their children as a record of gratitude for his illustrious service which brought peace, prosperity and glory to his country, a tribute of affection for his virtue which adorned his useful life and won for his imperishable name the respect and affection of mankind."

The statue was unveiled July 4, 1855, three years after Clay died. All patriotic organizations in the Pottsville area joined in a parade which preceded the ceremony.

## APPENDIX

Schuylkill County was formed in 1811 from parts of Berks and Northampton counties. A small area was added on the northwest from Columbia and Luzerne counties in 1818. The area of Schuylkill County is 840 square miles. Its average length is 30 miles and the average width is 24½ miles.

Dates of the establishment of principal boroughs and townships and origin of their names are:

Ashland Borough (for Henry Clay's estate near Lexington, (Ky.), formed from Butler Township in 1847.

Auburn Borough (for the "village" in Oliver Goldsmith's poem, "The Deserted Village"), from South Manheim Township in 1857.

Barry Township (for Commander John Barry in the Revolutionary War), from parts of Norwegian and Schuylkill Townships in 1822.

Blythe Township (for Judge Calvin Blythe), from Schuylkill Township in 1846.

Branch Township (for the west branch of the Schuylkill River), from Norwegian Township in 1838.

Butler Township (for William Orlando Butler, hero of War of 1812 and Mexican War), from Barry Township in 1848.

Brunswick Township, an original township and divided into East and West Brunswick Townships in 1835 (name of German origin).

Cass Township (for Lewis Cass, soldier and explorer), from Branch Township in 1848.

Cressona Borough (for John Chapman Cresson, engineer and railroad executive), from North Manheim Township in 1857.

Coaldale Borough (for the coal industry), from Rahn Township in 1906.

Delano Township (for Warren Delano, maternal grandfather of President Franklin D. Roosevelt), from Rush Township in 1882.

Eldred Township (for Judge Nathanial Eldred), from Upper Mahantongo Township in 1849.

Foster Township (for Judge Nathaniel Foster), from Barry, Butler and Cass Townships in 1855.

Frailey Township (for Judge Charles M. Frailey), from Tremont and Branch Townships in 1847.

Frackville Borough (for its founder, Daniel Frack, Sr.,) from Butler, West Mahanoy and New Castle Townships in 1876.

Gilberton Borough (for John Gilbert, coal operator), from Mahanoy Township in 1873.

Girardville Borough (for Stephen Girard), from Butler Township in 1873.

Gordon Borough (for Judge David F. Gordon of Reading), from Butler Township in 1891.

Hegins Township (for Judge Charles W. Hegins), from Lower Mahantongo Township in 1854.

Hubley Township (for Judge Francis B. Hubley), from Lower Mahantongo Township in 1853.

Kline Township (for Judge Jacob Kline), from Rush Township in 1872.

Landingville Borough (originally Orwigsburg Landing), from North Manheim Township in 1888.

Manheim Township, an original township and divided into North and South Manheim Townships in 1845 (name of German origin).

Minersville Borough (for the coal industry), from Branch and Norwegian Townships in 1842.

Mahanoy Township (for the Indian term, "mahoni," a salt lick), from Rush Township in 1850.

Mahanoy City Borough (name of same derivation), from Mahanoy Township in 1863.

Mahantongo Township (Lower), an original township which dissolved into Hubley, Hegins, Porter and Frailey Townships (name from the Indian term meaning "plenty of venison.")

Mahantongo Township (Upper), an original township (name of same origin).

Mt. Carbon Borough (meaning "mountain of coal,") from North Manheim Township in 1864.

Middleport Borough (mid-way between Pottsville and Tamaqua), from Blythe Township in 1859.

McAdoo Borough (for William G. McAdoo, once Secretary of State), from Kline Township in 1896.

Mechanicsville Borough (its first settlers were mechanics), from Port Carbon in 1914.

Norwegian Township (early settlers thought its mountains resembled rugged Norway), an original township.

East Norwegian Township (name of same origin), from Norwegian Township in 1840.

New Castle Township (from the coal town of the same name in England), from Norwegian Township in 1847.

New Philadelphia Borough (named for the City of Philadelphia), from Blythe Township in 1867.

New Ringgold Borough (for Major Samuel Ringgold of Mexican War fame), from East Brunswick Township in 1877.

Orwigsburg (for its founder, Peter Orwig), from West Brunswick Township in 1823.

Pine Grove Township (for a fine stand of pine trees in the valley), an original township.

Pine Grove Borough (name of same origin), from Pine Grove Township in 1843.

Palo Alto Borough (for the battle of Palo Alto in in the Mexican War), from East Norwegian Township in 1854.

Port Carbon Borough (because of early shipments of coal by canal), from East Norwegian Township in 1852.

Port Clinton Borough (for Dewitt Clinton, promoter of the Erie Canal), from West Brunswick Township in 1852.

Porter Township (for Governor David R. Porter), from Pine Grove and Mahantongo Townships in 1840.

Pottsville (for its founder, John Pott), laid out in 1816, became a third class city December 1, 1913.

Reilly Township (for Judge Bernard Reilly), from Branch and Cass Townships in 1857.

Rush Township (for Judge Jacob Rush), an original township.

Ryan Township (for Judge James Ryan), from Ma-West Penn Township in 1860.

Ringtown Borough (from a famous story about a "stolen" ring), from Union Township in 1909.

Ryan Township (for Judge James Ryan), from Mahanoy Township in 1868.

Schuylkill Township (from the Dutch word for 'hidden stream'), an original township.

Schuylkill Haven Borough (a haven or point for shipping coal), from North Manheim Township in 1841.

St. Clair Borough (for St. Clair Nichols who owned land there), from East Norwegian and New Castle Townships in 1850.

Shenandoah Borough (probably from an Indian name meaning "sprucy stream"), from Mahanoy Township in 1866.

Tremont Borough (from the French "tres monts" or three mountains), from Tremont Township in 1866.

Tremont Township (same origin of name), from Pine Grove Township in 1848.

Tamaqua Borough (for the Indian equivalent of little beaver stream), from Schuylkill and West Penn Townships in 1837.

Tower City Borough (for its founder, Charlemagne Tower, Sr.), from Porter Township in 1892.

Union Township (for the union of area from which it was formed), from Rush Township in 1833.

East Union Township (same origin of name), from Rush, Mahanoy and Union Townships in 1867.

North Union Township (same origin of name), from Union Township in 1867.

Washington Township (for George Washington), from Wayne and Pine Grove Townships in 1856.

Walker Township (for Judge Thomas J. Walker), from Schuylkill Township in 1878.

Wayne Township (for General Anthony Wayne), from Manheim and Pine Grove Townships in 1827.

West Penn Township (for William Penn or Pennsylvania), an original township.

West Mahanoy Township (for the Indian term "mahoni," a salt lick), from Mahanoy Township in 1875.

Vol. VI, No. 1, Publications of the Historical Society of Schuylkill County.)

HISTORICAL SITES IN SCHUYLKILL COUNTY (Suggested by the Historical Society of Schuylkill Co.)

Three frontier forts: Fort Lebanon, route 122 at Deer Lake; Fort Dietrich-Schneider, opposite the Appalachian Trail and across route 83 opposite the Blue Mountain; Fort Franklin, named for Benjamin Franklin, off route 443 at the base of the Blue Mountain about three-fourths of a mile south of Snyders.

Old Red Church, or Zion Church, on U. S. Highway 122, south of Orwigsburg. Site of the first church in Schuylkill County. The original building was burned by Indians about 1756.

Indian trails: "Shamokin Path," leading from Bethel and settlements to the south, through the western part of our county to Sunbury; the old "Tory Path" in the eastern end of the county, leading from the once Quaker settlement at Maiden Creek, Berks County, to Catawissa.

Schuylkill Gap in Sharp Mountain, at the southern entrance to Pottsville on route 122. Through this gap went an early Indian path, the King's Highway, the Schuylkill Canal, two railroads and millions of tons of anthracite coal.

The Indian Head and Indian Run Valley, a natural stone face lying near the eastern end of the 10-mile Indian Run-Swatara Valley, located over the Schuylkill River from route 122. In that valley, Indians sought shelter when they returned east to perpetrate some 30 massacres in this county.

Tumbling Run Dams, off route 122 on the Tumbling Run-Lewistown Valley highway, once feeders for the slack-water reaches and the channel of the Schuylkill Canal and its fleet of canal boats.

Henry Clay Monument, above Centre street, Potts-ville, the county's tribute to a great American.

Mahanoy, Gordon and Girard Planes, built to overcome steep grades and eliminate long railroads, early engineering feats in the county's history.

East Mines Shaft, route 122 at East Mines, designed to take the mammoth vein of coal, the greatest mine shaft of its day, sunk by General Henry Pleasants who blew up the famous crater at Petersburg, Va.

## BIBLIOGRAPHY

History of Schuylkill County—1881.

"Old Schuylkill Tales" by Mrs. Ella Zerbey Elliott.

"Schuylkill County in the World War" by E. 1.. Clifford.

"Tales of the Blue Mountains" by D. C. Henning.

"The Schuylkill Rangers" by John B. Bowman.

"Schuylkill County Farm History" by Walter Bollinger.

"History of Schuylkill County," J. H. Zerbey.

"Tragedy of the Crater" by Henry Pleasants.

"Story of the 48th Regiment" by Joseph Gould.

"Biographical and Patriotic Cyclopedia of Schuylkill County (1893) by Samuel T. Wylie.

"History of Northampton, Lehigh, Monroe, Carbon and Schuylkill Counties" (1845) by Daniel Rupp.

"Historic Gleanings of Schuylkill County" by Sarah Ann McCool, (Printed in the Shenandoah Weekly Herald on February 8, 1874 to November 27, 1875).

"History of Schuylkill County" (1907) by Adolph W. Schalk and D. C. Henning.

Booklet Commemorating the 175th Anniversary of Schuylkill Haven.

"History of Schuylkill County" by C. W. Unger.

"The Story of Anthracite," Hudson Coal Company.

Reports of the U. S. Bureau of Mines.

and

Publications of the Historical Society of Schuylkill County.

